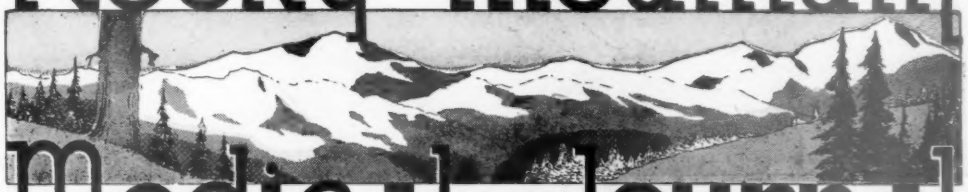
Rocky Mountain Medical Journal



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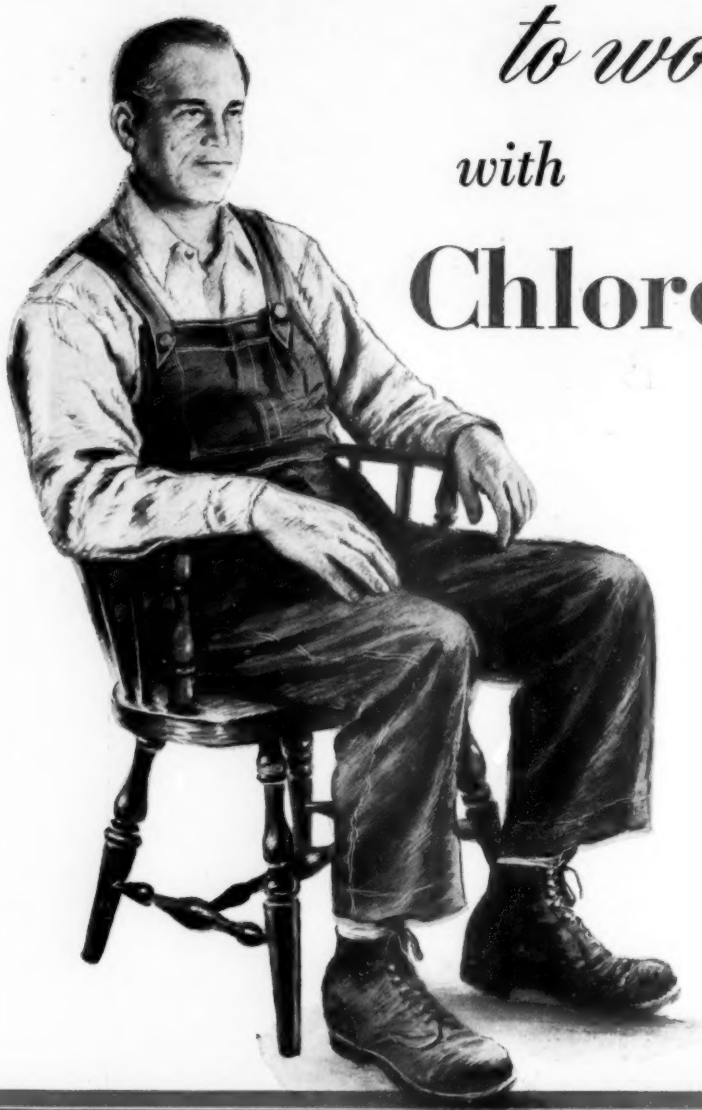

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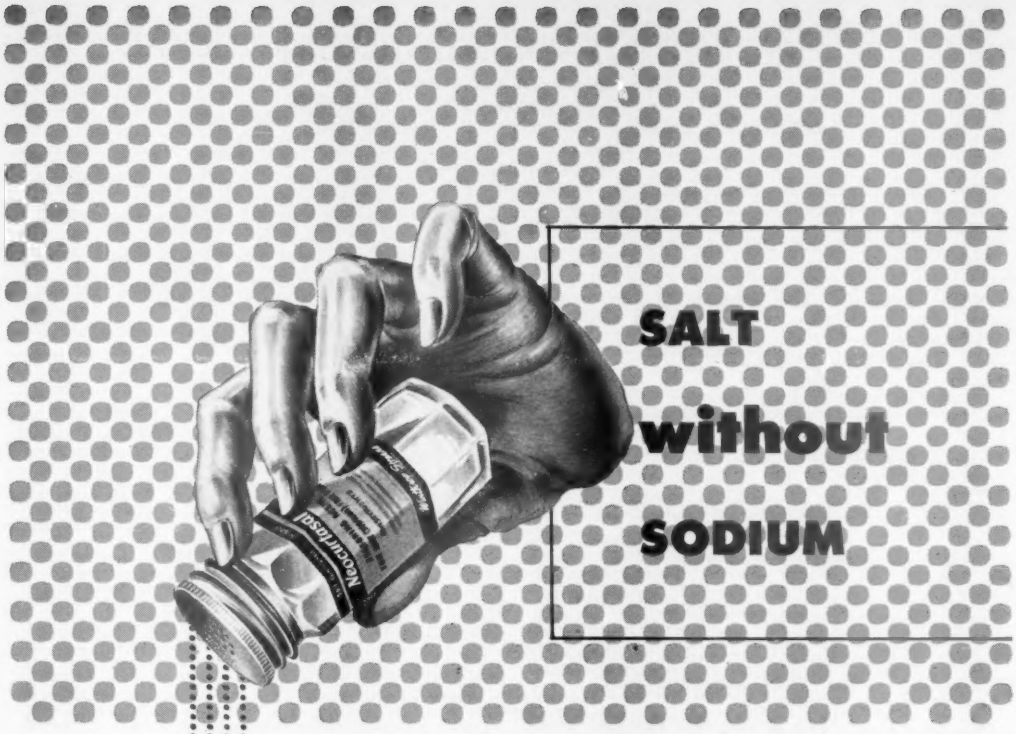
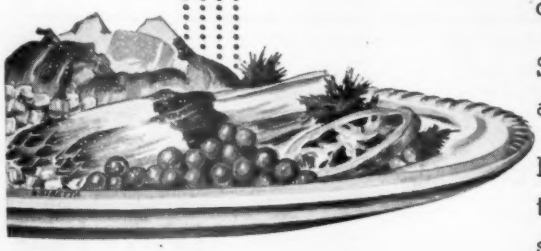
Table of Contents

VOLUME 47 NUMBER 3

MARCH, 1950





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Manuscripts: Scientific Articles, Case Reports, etc., from any state for which this is the Official Journal should be submitted to the Scientific Editor for that state as named in the Editorial Board, above. Other material from any participating state should be submitted to the Associate Editor for that state as named above. Manuscripts from outside the Rocky Mountain area should be sent direct to the Journal office. Manuscripts must be typewritten, double or triple spaced, using only one side of each sheet. It is the policy of this Journal to omit bibliographies.

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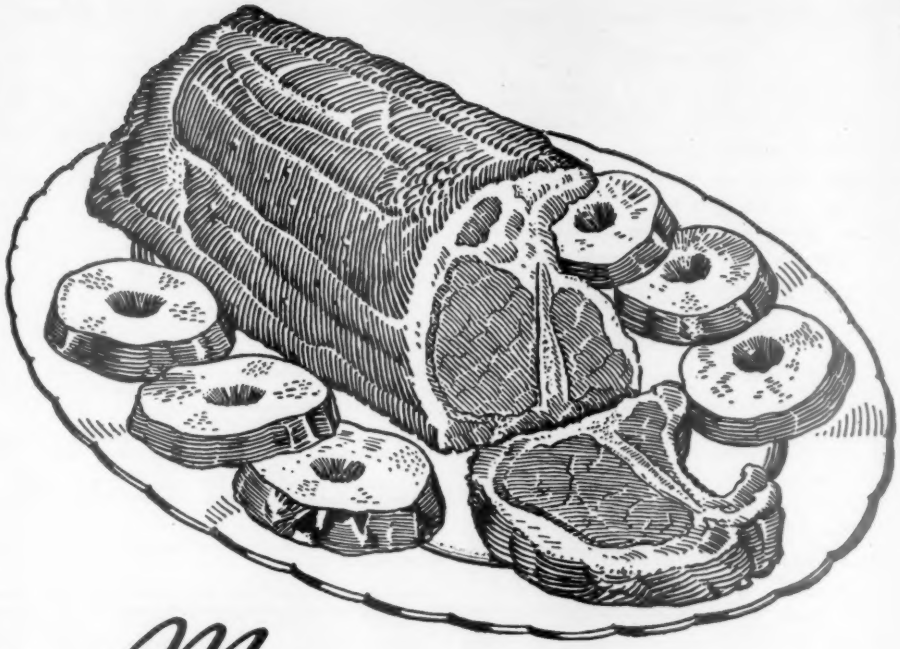

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*McLester, J. S.: Protein Comes Into Its Own, J.A.M.A. *139*:897 (Apr. 2,) 1949

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General Counsel: Mr. J. Peter Nordlund, Attorney-at-Law, Denver.

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(1) Lyon, R. A.: Am. J. Obst. & Gynec. *47*: 532, 1944. (2) Groper, M. J., and Biskind, G. R.: J. Clin. Endocrinol. *2*:703, 1942. (3) Wiesbader, H., and Filler, W.: Am. J. Obst. & Gynec. *51*:75, 1946.

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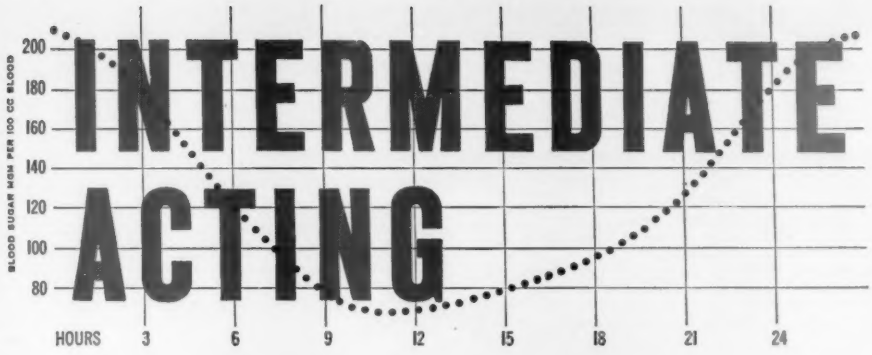

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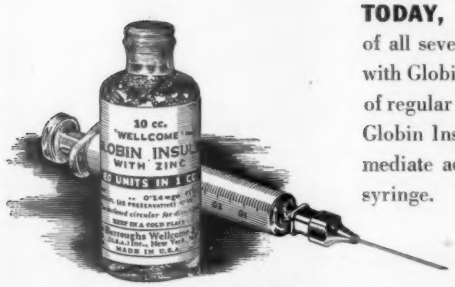

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1. Rohr, J.H., and Colwell, A.R.: Arch. Int. Med. 82:54, 1948.
2. ibid Proc. Am. Diabetes Assn. 8:37, 1948.

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Rocky Mountain Medical Journal
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1950

Editorial

Two Don'ts and Two Do's

ON the medical sector of the total war against predatory bureaucracy, experience has proven that the medical profession must observe two don't's and two do's in order to battle more effectively.

Don't attempt to be theoretical, philosophical, or hypothetical in your presentation of our cause. You will be defeated because, on paper, compulsory sickness insurance is simply perfect and perfectly simple.

Don't ask consideration for the art of medicine, for the science of medicine, for the traditions of medicine, for the status of doctors nor of the doctor's pocketbook. If you do you will be accused of having "a vested interest in the status quo," and in this day, when communistic propaganda dominates the thinking of so many people in all parts of the world, having any vested interest and favoring any status quo are about the worst sins you can commit!

Do rely on historical fact, human experience and the words of the various editions of the Wagner-Murray-Dingle bills themselves. Facts outfight fiction.

Do remember that you are dedicated to the best interests of the patient. Base every argument upon whatever is in the best interests of the patient. Your only excuse for being in this battle is that you are fighting for those interests of the patient.

LAWRENCE T. BROWN, M.D.

*Anti-Histamine Drugs and the Common Cold**

TIME seems to have passed when most new drugs were found by the physician to be good, bad, or indifferent before the patient ever learned of their existence. During the past decade almost every physician has been confronted with patients who want to know the value of this or that new drug which has been praised highly in the daily press or a lay magazine. At one time or another, most of us have been on an embarrassing spot for lack of information to answer the posed query. The patient is not aware that the rapidly disseminated news of each "discovery" often reaches him as fast as it does his physician. Unless the subject is in the realm of the physician's chief interest, he has probably not read the few articles about the drug in medical journals—much less, has he had sufficient personal experience upon which to base an opinion. Many of us are chagrined and editorial comment about this has appeared in other journals.

While the above trends have been worrisome, nothing to date has paralleled the flagrant advertising promotion of claims for the antihistamine drugs as cures for the common cold. Indeed, a one-day cure would seem to have been found! Very few authoritative papers have been written on this subject. The original article by Brewster has been misquoted and implication is left that we have been hiding these wonderful drugs under a basket. Almost all of the reputable drug houses have deplored such promotion tactics, and those which manufacture or distribute antihistamine drugs have notified us that their products are available only on prescription. While they have made no gross claims they, in self-defense, are distributing to physicians samples and brochures of their antihistamine drugs especially modified for the treatment of colds. To some, this may seem to confirm the exaggerated claims made

*This editorial was written by Dr. Joyce in response to the Editor's request.

by the offending advertisers. A brief word concerning the action and uses of the antihistaminics might help orient us.

The antihistamine drugs were developed in France in 1938. Because of the war little progress was made, and it was not until 1946 that they became available for general use. They are not effective, in vitro, against histamine but act by competitive selection to protect tissue cells against the effects of histamine regardless of whether the histamine arises from an endogenous or exogenous source. While these drugs may inhibit smooth muscle contraction induced by histamine, they do not protect the smooth muscle from acetylcholine or barium. They inhibit edema formation resulting from the histamine-like (H-substance) material liberated in the allergic reaction of cellular antibody and antigen. They do not interfere in any way with the antigen-antibody union. They do not prevent the formation of antibodies following antigen injections. While they may relieve allergic symptoms, their degree of efficacy is related to the edema type of allergic response. Thus, the greatest relief occurs in urticaria, next greatest in allergic rhinitis, to a much lesser extent in asthma, and none whatever in other types of allergies which involve the larger elements of the vascular system.

The side effects were found to be useful in some cases. Certain antihistaminics have been used to ameliorate the muscular cramps of the menses, yet another of them frequently causes urinary retention. The sedative effects of some are pronounced, and it is found that they potentiate the action of the barbiturates. It has been recently reported that one antihistaminic was beneficial in petit mal, while another actually aggravated such conditions.

Now that more is known of their action, it is reasonable to expect that they would be useful to some extent in any inflammatory reaction of the respiratory tract. There is a liberation of histamine-like substance in the nasal tissues in a cold. The antihistamine drugs would be expected to act as a decongestant, as it were, and thus make a cold less bothersome to the patient. Experience shows that some colds respond well and in others there is little, if any, relief. Inasmuch as it is generally felt that the common cold is due to one or more types of virus, it would not be expected that the antihistamine drug could cure a cold. The writer must say, however, that he does not know whether anyone has attempted to prove that these drugs are capable of neutralizing a virus.

The writer, personally, has seen no serious side effects from the use of these drugs. Careful studies have shown delayed reaction times and other related disturbances in normal doses in individuals who were not aware that they were disturbed. All of us have seen patients who could not tolerate any antihistaminic in normal doses. A serious side effect is to be distinguished from the usual intolerance since many "harmless drugs" could produce serious damage if the dose were large enough. In the case of antihistaminics the vicious advertising would lead the laity to believe they can produce no harm. With perceptive and reactive acuity diminished, considerable harm could result from these drugs in children riding bicycles on city streets, carpenters and other laborers, people driving automobiles, and others.

Under adequate control, and assuming the physician will warn his patients of the usual side effects of these drugs, they can be useful adjuncts to the few drugs available to treat the lowly cold. We must not rebel against the manner they are presented to the public by reactionary condemnation of the drugs. They are useful and should be used even if they do not cure. It is hoped that satisfactory control can be regained, thus limiting their use to prescription. If this is the miracle drug, the millennium has already passed us by.

FRANK T. JOYCE, M.D.

Original Articles

LUNG RESECTION FOR SUPPURATIVE DISEASE OF THE LUNG*

FRED R. HARPER, M.D., and WILLIAM B. CONDON, M.D.
DENVER

Treatment of suppurative lung disease has been confused until the last five or six years. Some important advances, both medical and surgical, have occurred during that time to make treatment specific and relatively safe. The advances have been along lines of specific antibiotics and improved surgical technic.

This article deals with our conception of the problem of suppurative lung disease in the light of recent advances. We are reporting our experience in lung resection since we returned from military service. During that period the advanced methods of treatment have been available.

Pathogenesis

Our conception of the pathogenesis of suppurative lung disease is based on the experimental work of Tannenberg and Pinner.[1] Clinical application of their experimental work can be summarized as follows: A combination of partial obstruction plus infection is responsible for development of suppurations in the lung. Obstruction may precede the infection as in case of foreign body or stenosis, or infection may precede the obstruction as in case of pneumonia or atelectasis when plugs of tenacious secretion prevent free drainage through the bronchus. Futhermore, infection in the lung does not go on to suppurative lung disease if the obstruction is relieved early. Infection which remains in the lung two to four weeks without free drainage results in suppurative lung disease.

From the above summary we conclude that it is important to recognize pulmonary infections or obstructions early and treat them vigorously with antibiotics and bronchoscopy before the infection progresses to the point of suppuration.

Relationship of Bronchiectasis to Lung Abscess

The principles underlying development of bronchiectasis would apply in most cases of lung abscess. We agree with Samson[3] that pulmonary abscess in general is a disease of aspiration rather than an embolic disease. In lung abscess, the infection is peripheral in location and smaller bronchi are obstructed so that adequate drainage through the bronchus is difficult to obtain. However, in most cases of lung abscess as in bronchiectasis, the two main factors of obstruction and infection are present. The similar pathogenesis of the two conditions is evidenced by the fact that in our series there were many cases of bronchiectasis with the same etiology as other cases of lung abscess.

In many of our cases it was difficult to decided whether the suppurative lung disease should be classified as bronchiectasis or lung abscess. Neglected cases of bronchiectasis will often develop lung abscess and even putrid empyema (Fig. 1). Conversely, improperly drained lung abscess will result in residual secondary cavities and bronchiectasis of varying degree and extent[6]. Therefore it would seem logical to consider bronchiectasis and lung abscess together under the heading of suppurative lung disease.

Infected Lung Cysts

Lung cysts may be small multiple cysts which, when infected, may be confused with bronchiectasis, or the cyst may be a single cyst which is only recognized clinically in the presence of infection and may be confused with a lung abscess. Finally the huge infected cysts may be mistaken for empy-

*Presented before the Ninth Western Colorado Springs Clinics at Grand Junction, Colorado, April, 1949.

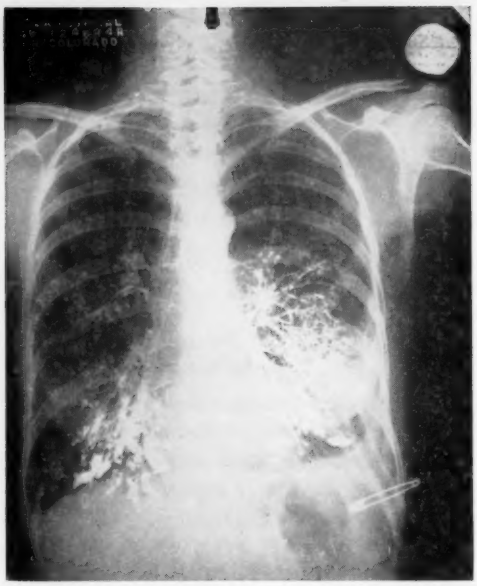

Fig. 1. Bilateral bronchiectasis complicated by lung abscess and putrid empyema.

ema. Infected lung cysts must therefore be classified with suppurative lung diseases and be kept in mind when evaluating any case of suppurative lung disease (Fig. 2).

Treatment

The treatment of suppurative lung disease can be divided into four phases: (1) prevention, (2) combatting the infection, (3) establishing drainage, (4) removal, in irreversibly damaged lung tissue.

Prevention

Prevention serves its best use in careful attention to details in managing the conditions which may lead to suppurative lung disease. For example, a child with whooping cough or measles should be carefully watched for evidence of complicating pneumonitis which may lead to bronchiectasis. The patient who is to undergo a surgical operation should be carefully examined for evidence of poor dental hygiene. Smith[10] has shown that the organisms which cause lung abscess are found in abundance around infected teeth. After operation, the patient should be watched for indications of postoperative atelectasis or, more properly, obstructive pneumonitis. If this postoperative complication is corrected early, no damage to the lung will result. Foreign bodies in the bronchi should be recognized and removed at once.

Combatting the Infection

Since the introduction of antibiotics, the infection associated with the bronchial obstruction can be effectively combatted. However, this treatment should be given early, vigorously and accurately. Smith[10] has described the organisms most commonly found in the pneumonitis which leads to suppurative lung disease and has recommended the drugs which are most effective. He feels that the majority of pulmonary abscesses result from the aspiration of infected material from the patient's own mouth or upper respiratory tract. These aspiration abscesses he divides into pyogenic and fusospirochetal types. The fusospirochetal type of infection results most frequently in a single isolated peripheral abscess (Fig. 3), while the pyogenic organisms more often bring about multiple small abscesses (Fig. 4). The sulfanamides are effective in the pyogenic type and combined

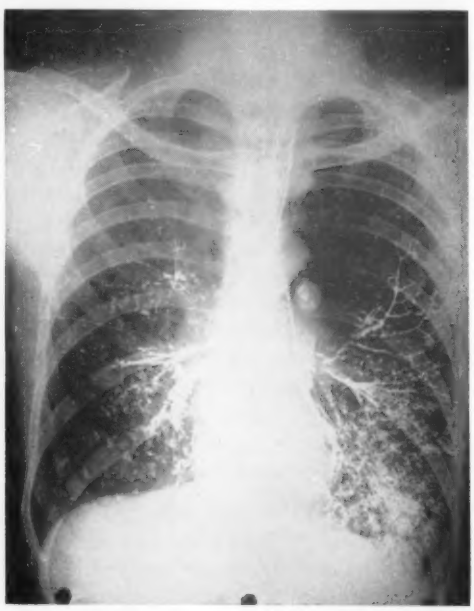

Fig. 2. Bronchogram of patient with large lung cyst which was removed by segmental resection. When lung cysts become infected they may simulate lung abscess or empyema.

with penicillin afford excellent treatment. In the fusospirochetal infections, pencillin should be used intensively and early, with or without supplementary arsenicals, sulfanamides, or streptomycin. Smith[10] has emphasized the importance of bacteriologic examination of the sputum so that the antibiotics may be administered specifically and accurately in order to obtain the best results.

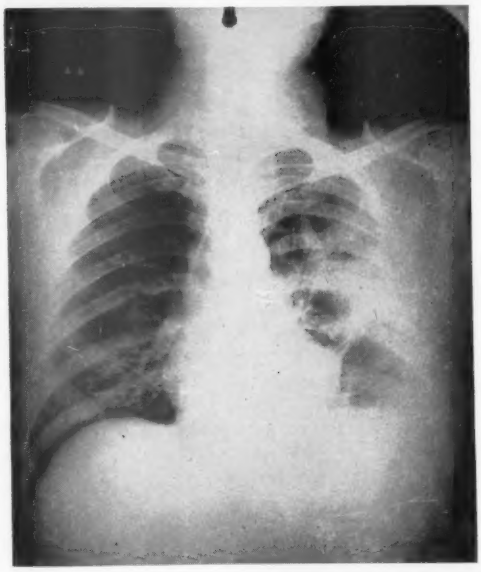

Fig. 3A. Acute fusospirochetal type of lung abscess. Note the abscess is single.

Establishing Drainage

As we mentioned before, obstruction to free drainage of the bronchi always accompanies the infection. Therefore, the other phase of treatment is to establish free drainage. The obstruction may follow as the result of infection, or the obstruction may precede the infection, but obstruction is always present and must be dealt with. Since the experimental work of Tannenberg and Pinner[11] has given us a rational basis for the time necessary to cause irreversible changes, we can judge how urgent it is to establish free drainage within one to two weeks. Therefore, these suppurative lung diseases must be treated vigorously during the early stages.

We agree with Samson[4] that the question of the type of organism or the question of bronchoscopy versus open drainage or the question of whether the problem is medical or surgical are all more or less beside the point when it comes to establishing drainage. It is true that pyogenic obscesses are more liable to be multiple and less amenable to open drainage while fusospirochetal or putrid infections are more liable to be single and accessible to open drainage. However, the infection is rarely a pure type of infection in either case. The point is that free drainage must be established and established early. If this drainage can be established through the bronchus by the use of antibiotics and posturing in the position which will allow the best drainage, so much the better. In some cases one or more bronchoscopies will establish drainage through the bronchus and result in resolution of the disease. However, time is the essence, and if these treatments, in the case of lung abscess, are not producing clinical and roentgenologic results, they should be abandoned and drainage established externally. Specifically, an x-ray should be taken once a week and the first x-ray that does not show marked and definite improvement should be evidence that the treatment

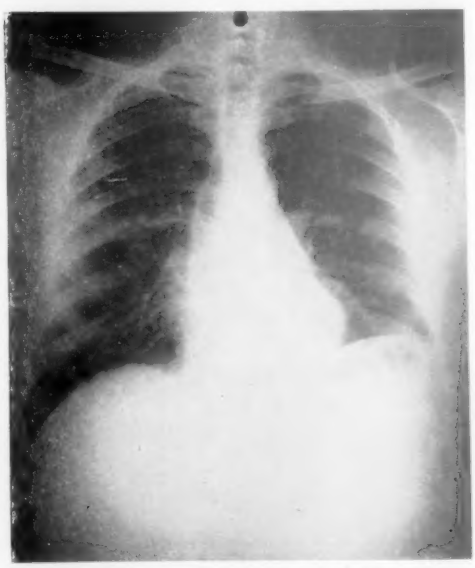

Fig. 3B. Subsequent x-rays of patient shown in Fig. 3A. Patient was cured by bronchoscopy and postural drainage without surgery.

is inadequate. X-ray improvement should be confirmed by clinical improvement.

A patient to illustrate this treatment is one who had a large abscess as shown in the first x-ray (Fig. 3). He was given adequate antibiotic therapy early. After one bronchoscopy, he drained very freely through the bronchus. Subsequent weekly x-rays showed progressive improvement and he improved clinically. The second x-ray shows that complete resolution took place without surgical interference.

A, large percentage of cases of lung abscess will not respond to the above treatment. These cases must be adequately drained before permanent changes such as multiple abscess, fibrosis and bronchiectasis occur. In these cases, external drainage should be done. In another group of cases, it is obvious that permanent changes have occurred, but the patient is too ill to warrant lung resection. These cases should be drained externally with the full knowledge that further surgery will be necessary just as appendiceal abscesses are drained with the knowledge that subsequent appendectomy will be required. In still other cases, the abscess will have been neglected until it ruptures into the pleura, causing a putrid empyema. In these cases, the empyema should be drained with wide open drainage as a surgical emergency. Definitive surgery can be done later.[9]

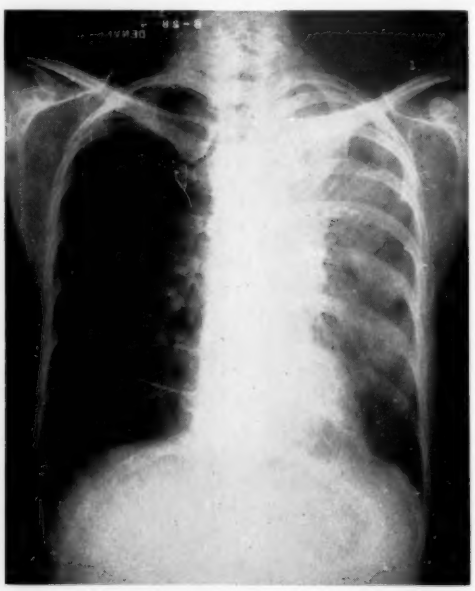

Fig. 4. Pyogenic lung abscess. Note extensive lung involvement with multiple abscesses. Pneumonectomy was necessary. Patient is now well.

Removal of Irreversibly Damaged Lung Tissue

After lung abscess has advanced to the point where permanent changes such as multiple loculations, bronchiectasis, fibrosis, etc., have occurred, external drainage will at best be palliative. In these chronic cases, if the condition of the patient warrants it, the diseased lung should be removed. In some cases, after external drainage, the patient will not be completely well because undrained pockets and bronchiectatic areas remain. In these patients, further attempts at drainage will not be successful; therefore, removal of the involved lung is the only method of effecting a cure. In cases where the obstruction cannot be relieved as in the case of tumor, unremovable foreign body, tuberculous stenosis, etc., the diseased lung including the obstructing lesion should be removed.

To the above indications for resection should be added patients with severe hemorrhage because external drainage will not relieve hemorrhage and may aggravate it. Some abscesses are not accessible for external drainage because of their location and should be resected. Children tolerate lung resection well and open drainage poorly. Lung resection, therefore, is to be preferred in children. Glover and Clagett[4] in listing eight indications for pulmonary resection in lung abscess include abscesses in children.

In bronchiectasis, the lesions are irreversible when the diagnosis is established. Therefore, removal of involved lung tissue is the only method of curing the disease. It is important that accurate diagnosis of the extent of the disease be made so that the amount of lung tissue to be removed can be estimated before surgery is undertaken. The method of determining the amount of involvement is to map out the bronchial tree with x-rays taken after filling the bronchial tree with lipiodol. In making

bronchograms, all five lobes should be completely filled.

We have been continuously broadening our indications as to the amount of lung tissue which can be safely removed and the age of patients suitable for surgery. Previously, we felt that older people were not suitable for surgery but we now have a 64-year-old in our series who withstood lobectomy very well. Pneumonectomy is well tolerated in the younger age groups but we do not believe that pneumonectomy should be undertaken if there is disease on the other side.

The bilateral cases offer the most difficult problem. If the disease is extensive on one side and minimal on the other side, removal of the diseased lung on the more involved side, provided it does not require a total pneumonectomy, will usually bring about an 80 to 90 per cent improvement in the patient's condition. However, it is important that all of the diseased lung on the more involved side be removed.

In some of the extensively involved bilateral cases, it is best to carry them along on medical management. In others, bilateral operation may be done[1]. It is this group of patients that prompted Overholt, Woods and Betts[7] to recommend segmental resection.

The operation of segmental resection is based on the anatomical studies of Jackson and Huber and others[5], who showed the lobes are actually subdivided into segments which are, in themselves, anatomic units with their own blood supply and their own bronchus. If the blood supply and bronchus to the segment are dissected out, that segment can be removed from the remainder of the lobe and uninvolved lung tissue in the rest of the lobe be preserved.

Removal of the lingula of the left upper lobe has been done in many cases since the operation was first suggested by Churchill and Belsey[2] in 1939. Clagett and Deterling[3] have described an excellent technic for segmental resection of the lingula. Resection of the lingula has been very successful. However, the lingula is in reality a separate lobe corresponding to the right middle lobe. It is doubtful if such a complete anatomical division exists in the other segments. Although we have performed segmental resections, we feel that there are certain inherent disadvantages to the operation.

From the pathologic standpoint, chronic pneumonitis associated with bronchiectasis extends throughout the entire lobe and cannot be demonstrated by bronchograms. This extension of inflammatory changes beyond the obviously involved segment is even more pronounced in case of lung abscess. This remaining pneumonitis would seem to predispose to future bronchiectasis in the remaining segment and impair its future function.

From a surgical standpoint, there are objections to segmental resection. In separating the segments, end bronchioles are left open thus causing air leaks which result in a high percentage of bronchial fistulae and unexpanded lungs. The incident of empyema is greatly increased, being 23.7 per cent of the series of Overholt, Woods and Betts[7]. In spite of antibiotics, empyema is a complication which adds to the risk of the surgery and impairs future pulmonary function. It has been shown repeatedly that blood supply of the lung is not constant and is characterized by frequent occurrence of anomalous vessels. In segmental resection, it would seem logical that not infrequently the blood supply to the remaining segment would be interefered with and hemorrhagic infarction and necrosis with final shrinkage of the remaining segment would result.

For the above reasons we have been reluctant to do segmental resections except in dealing with the lingula of the left upper lobe until further experience shows that the procedure will be entirely satisfactory. At the 1949 meeting of the American Association for Thoracic Surgery, Chamberlin proposed certain technical improvements in segmental resection designed to alleviate some of the above objections to the operation.

Pre- and Postoperative Care

Meticulous attention to details before lung resection during operation and after opera-

tion can make a vast amount of difference in mortality and morbidity. In preparing a patient with suppurative lung disease for lung resection a diligent effort should be made to reduce infection in the lung. By reducing the amount of infection, danger of spilling of the infection into normal lung during operation is reduced but, more important, the hilar lymph nodes are reduced in size and make the technical procedure much safer. Also there is less danger of complicating empyema if infection is at a minimum at time of surgery. In order to reduce infection, attention should be given to possible sources of infection such as teeth or sinuses. The lung should be drained as well as possible. This is accomplished by postural drainage which should be done every three or four hours while patient is awake. It is best to have the patient lean over the edge of the bed with his head on a pillow on the floor and take six deep breaths and then cough six times and repeat the procedure until he is not able to raise any more sputum. If postural drainage is not sufficient to drain the lung, bronchoscopy must be performed.

The infection is also combatted by use of antibiotics. Pencillin should be given in dosages of about 300,000 units daily to get rid of the gram positive organisms. However, the gram negative organisms are not affected and may increase in number. For that reason streptomycin should also be given in one gram dosage daily. Aerosal penicillin and streptomycin may also be used in addition to intramuscular administration but not in place of intramuscular use.

The state of the patient's nutrition should be evaluated and treated. After operation the body reserve of protein and vitamins, particularly vitamin C, is rapidly depleted. It is therefore important that he not go to operation in a depleted state. Vitamins B and C should be given in dosages of vitamin C one gram daily and 50 milligrams of thiamin, 50 milligrams of riboflavin, and 500 milligrams of nicotinic acid.

Blood loss at operation has been estimated at between three and four pints. This amount of blood should be replaced during surgery. Therefore, preparation should be made in advance for available blood. The patient should be typed and cross-matched, and the Rh factor of patient and donors determined in advance.

After operation is completed, immediate attention should be given to possibility of shock. Blood pressure should be watched carefully; oxygen tent should be used and a free airway maintained. In lobectomy it is important to re-expand the remaining lobe or segment of lobe as soon as possible. This prevents atelectasis and danger of postoperative empyema. To expand the lung we use a method of maintaining a constant negative pressure as illustrated in Fig. 5. The drawing shows that the two tubes which were placed in the chest cavity at the termination of the operation are joined by a Y connector and the tubing from the Y connector is attached to a glass tube which goes to the bottom of an air-tight bottle filled with sterile water to a depth of 15 to 20 cm. (the break in the tube is the artist's method of showing length; the tube is continuous).

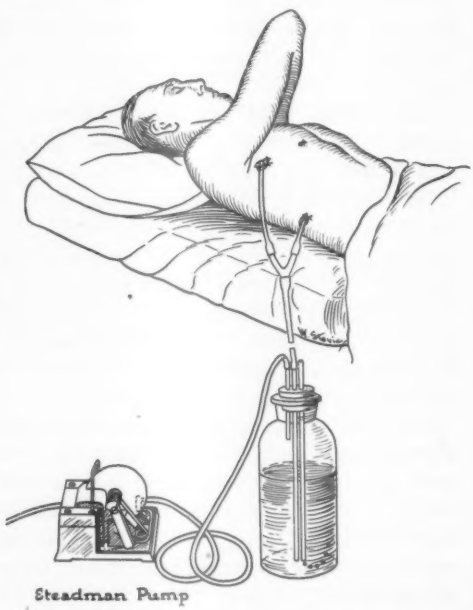

Fig. 5. Diagram of apparatus used by us to crate negative pressure in the chest and bring about early re-expansion of the remaining lobe after lobectomy.

A second glass tube goes through the rubber stopper into the sterile water for a depth of 15 to 20 cm. The end of this tube is open. The system as such would insure a negative pressure, but in order to maintain a constant negative pressure at 15 to 20 cm. of water a Steadman pump is attached to a short glass tube which goes just through the rubber stopper. The pump will create a vacuum in the bottle. When this vacuum exceeds 15 to 20 cm. of water pressure, air will bubble through the open tube and thus keep the negative pressure equal to the column of water 15 to 20 cm. deep. If much blood or secretion from the chest increases the amount of fluid in the bottle, a trap bottle can be used in the system.

Daily x-rays should be taken and when it is evident that the lung is completely expanded (generally forty-eight hours), tubes should be removed.

Vitamins and antibiotics should be continued postoperatively and the patient given an adequate diet.

Careful attention should be given to signs of developing atelectasis. The patient should be made to cough and move about. If atelectasis has developed, postoperative bronchoscopy should be done.

If fluid forms in the chest it should be aspirated and in case empyema develops it should be treated.

Results

By careful selection of cases and by careful attention to pre-operative preparation and postoperative care, we have obtained good results in the series of patients we have resected for chronic suppurative lung disease. The accompanying table shows we have done 104 resections for benign suppurative lung disease. In ninety-six cases, lobectomy was done and in eight cases a total pneumonectomy was done. In these 104 cases, there was no mortality and the complications were not of a serious nature and in all cases the final result was good.

The points which our results emphasize are that if the patients with suppurative lung disease are carefully followed and vigorously treated from the inception of the disease, the serious complications can be avoided. Lung resection for chronic irreversible supporative lung disease can be done with very low morbidity and mortality if the patients are properly prepared before operation and meticulous attention is given to details during the operation and in the postoperative period. Therefore, the most conservative course seems to be to remove the diseased lung as soon as it is apparent that the disease has progressed to the stage where it is irreversible.

TYPES OF LUNG RESECTIONS*

Pneumonectomy		8
Lobectomy		72
	Left lower	22
	Right lower	20
	Right middle	10
	Right upper	7
	Left upper	6
	Right middle and lower	5
	Right middle and upper	2
Segmental Resection		24
	Left lower lobe and lingula	17
	Lingula alone	4
	Left basal segments	2
	Left apical segment	1
Total		104

*Note: Results brought up to date as of October 15, 1949.

Conclusions

Suppurative lung disease results from obstruction to the free drainage of the bronchus plus infection. If this obstruction and infection are allowed to remain for a period of weeks, irreversible damage to the lung in the form of bronchiectasis or lung abscess will follow. On the other hand, if free drainage and vigorous treatment with antibiotics are instituted early, the inflammatory process is reversible and the lung will not be permanently damaged. When irremovable obstruction exists, or permanent damage has occurred, the treatment is resection of the diseased portion of the lung. As shown by our experience, the removal of diseased lung tissue is no more hazardous than removal of other diseased organs and should be undertaken as soon as a definite diagnosis has been established.

REFERENCES

[1]Bisgard, J. D., and Sevenson, S. A., Jr.: Bilateral Lobectomy for Bilateral Bronchiectasis. Arch. Surg., 54:483, 1947.

[2]Churchhill, E. D., and Belsey, Roland: Segmental Pneumonectomy in Bronchiectasis: the Lingula Segment of the Left Upper Lobe. Ann. Surg., 109:481-484, 1939.

[3]Clagett, O. T., and Deterling, R. A.: A Technic for Segmental Pulmonary Resection with Particular Reference to Lingulectomy. Jour. Thor. Surg., 15: 227-238, Aug. 1946.

[4]Glover, R. P., and Clagett, O. T.: Pulmonary Resection for Abscess of the Lung. Surg. Gynec. and Obst., 86:385, Apr. 1948.

[5]Jackson, C. L., and Huber, J. F.: Correlated Applied Anatomy of the Bronchial Tree and Lungs with a System of Nomenclature. Diseases of the Chest, 9:1-8, 1943.

[6]Kent, E. M., and Ashburn, F. S.: Pulmonary Resection for Chronic Lung Abscess. Jour. Thor. Surg., 17:523-529, Aug. 1948.

[7]Overholt, R. H.; Woods, F. M., and Betts, R. H.: An Improved Method of Resection of Pulmonary Segments. Jour. Surg., 17:464, Aug. 1948.

[8]Sampson, Paul C.: Lung Abscess. Diseases of the Chest, 14:79-91, Jan. 1948.

[9]Shaw, R. R., and Paulson, D. L.: Pulmonary Resection for Chronic Abscess of the Lung. Jour. Thor. Surg., 17:514-522, Aug. 1948.

[10]Smith, D. T.: Medical Treatment of Acute and Chronic Pulmonary Abscesses. Jour. Thor. Surg., 17:72-90, Feb. 1948.

[11]Tanenberg, Joseph, and Pinner, Max: Atelectasis and Bronchiectasis. Jour. Thor. Surg., 11:571-616, Aug. 1942.

[12]Minor, G. R.: Care of Patients with Surgical Diseases of the Chest. Surg. Gynec. and Obst., 86:209, Mar. 1948.

THE MASQUERADE OF CUTANEOUS MALIGNANCY*

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At masquerade parties, human angels, goblins and devils may be dressed and disguised interchangeably. On the skin, analogous masqueraders hold forth, too, but of course our readers are not interested in the angels. We are after the goblins and devils. The goblins are only mischievous, like common freckles and fibromas. The devils would destroy us, as does cancer. Let us sit on the side-lines while we try to penetrate the disguise first of the goblins and then of the devils.

As the head of a laboratory of dermatologic research for years, I am happy to say that of the large number of biopsy specimens which have been submitted, a notable proportion was sent for the purpose of eliminating cancer. This bespeaks a praiseworthy consciousness on the part of physicians. Many of the lesions were not cancerous; they were only mischievous, and inasmuch as the goblins are the lesser evil, I will dispose of them first and briefly. They are benign and not even potentially malignant.

Non-pigmented Nevi (simple intradermal): Our records will show that non-pigmented nevi are among the most mischievous. They are commonly known as "white moles." This is readily understandable because they occur commonly upon the face and are somewhat translucent, hard, and nodular. Like many basal cell cancers, their rate of growth is slow, and when the patient states that they have recently enlarged, the diagnosis clinically as to cancer or no cancer may be impossible. Dermatologists of the first water, even, are baffled. Incidentally, I have found that the sudden enlargement of a nevus is sometimes explained under the microscope by the development of a folliculitis around a hair shaft which is extending through the lesion. Or a tiny sebaceous cyst may develop similarly. (Commonly enough, there is an intermixture of hairy nevus within an intradermal nevus.) Evidently, the moral can be drawn that doubtful lesions like these should be excised in toto and be examined microscopically.

Sebaceous glands frequently become hypertrophied upon the foreheads of elderly people in a manner that is almost physiologic. When they amount to nodules, they can simulate basal cell cancer and have necessitated microscopic examination rather frequently in the experience of my laboratory.

Verruca vulgaris is not always digitate. Occasionally, the surface is smooth because the keratinous material on the surface occupies the intervillous spaces solidly and does not extend correspondingly over the tips of the villosities.

Seborrheic keratoses: Although they practically never become maligant, these are genuine masqueraders when they be-

*Presented before the Third Annual Rocky Mountain Cancer Conference, July, 1949, in Denver, Colorado. The lecture was accompanied throughout with lantern slides. From the Department of Dermatology and Syphilology, School of Medicine, University of Pennsylvania.

come secondarily infected and ulcerated; this can raise the question of malignant melanoma. Here again, only the histologic examination may settle the diagnosis. Of course, the characteristic and unmodified seborrheic keratosis offers no problem in diagnosis. Their superficiality, extremely slow growth, and the abrupt manner in which they extend upward above the level of the skin are almost diagnostic in themselves, even when they are only lightly pigmented. That is, the growth processes extend upward, similar to verruca vulgaris, and not downward as in cancer.

Dermatofibroma (histiocytome, sclerosing angioma, subepidermal nodular fibrosis). This hard deeply imbedded lesion is a common problem. Fortunately, it occurs mostly upon the torso and extremities, and accordingly it is only when it occurs upon the face that there is likely to be any confusion. The most valuable criterion in differential diagnosis is that the lesion has been present for a long time, perhaps years, without progressing.

Molluscum contagiosum. Although this is commonly a disease of children or young people, it occasionally affects adults. Its favorite location on the face, together with the translucence and slow development, are well calculated to put the physician in suspense. However, an awareness of this hazard will lead the physician to scrutinize the summit of the papule, even calling upon the assistance of the loupe. In molluscum contagiosum, a minute umbilication is commonly discovered, suggesting a comedo, but not black. The lesion should be compressed firmly after the manner of expressing a comedo, and now it will be found that a tough gray core will be extruded. The latter is not soft, however, and is tightly attached to the underlying parts. If the physician is still in doubt, the core can be examined in 10 per cent potassium hydroxide solution under the microscope for the pathognomonic molluscum bodies, the descriptions of which are readily available in texts. Incidentally, the histologic picture is also pathognomonic.

Granuloma pyogenicum: This can be mistaken for an angioma or for a hemangio-sarcoma. Indeed, the lesion has the gross morbid anatomy of such tumors, and it is only the related circumstances which prevents mistake. Thus, this granulation tissue-like "tumor" projects dome-like or pedunculated above the surface of the skin (or mucous membrane), grows fairly rapidly over a period of weeks or months and ulcerates. However, it is usually solitary, and when the history of a preceding laceration is elicited, the experienced dermatologist usually makes the diagnosis promptly. Microscopically, the picture is almost identical with that of hemangioma. The sum total of these considerations is that a neoplasm is mimicked closely indeed. In fact, there is only one saving grace, namely, that experience has shown that the course of granuloma pyogenicum is not neoplastic. Although it recurs if not completely excised, it does not invade and destroy tissue locally nor metastasize.

The dermatoses described above are cited from my laboratory records of histologically proved cases, and which have come under the clinical observation of skilled dermatologists. They are not isolated cases and must be significant as regularly parading masqueraders.

Paraffinoma and sesame oil tumors: Less commonly, paraffinomas may masquerade as sarcoma, and, incidentally, it has been recently discovered that sesame oil can act similarly to paraffin oil. The importance of sesame oil is pointed up by the fact that it is presently such a common vehicle for parenteral injections. The physician should become suspicious at once when a sarcoma-like lesion is located over the deltoid region or upon the buttocks and should inquire, naturally, as to previous injections. Occasionally, paraffin oil metastasizes from the deltoid region into the axillary lymph nodes, thus reintroducing the possibility of sarcoma. A biopsy settles the diagnosis at once because the picture is pathognomonic.

To summarize our "goblin" group, be it said that the general practitioner can take consolation from the fact that benign le-

sions have led even the cutaneous experts into error or at least confusion. This emphasizes once again the stern necessity for performing biopsies or for submitting the lesions to the laboratory after they have been excised. Apart from motives of simple honesty to the patient and professional pride, there remains the possibility of an occasional legal complication which speaks for itself.

Let us turn next to the devils which masquerade as non-cancerous diseases. They may be classified into two parts. Part 1 comprises the precanceroses and other dermatoses which are of epithelial nature and are potentially cancerous in their own right. In the second group, there falls a motley assemblage of cancers which become developed secondarily in scars, in granulomas and even in an occasional simple degenerative process (x-ray cancer). Time will not permit a detailed description of all of the members of these groups; they number at least a score. May I repeat here the promise that I made earlier that I would attempt to cover only the high points.

The secondarily developed malignancies which comprise Part 2 will be disposed of first because they are the simplest. Familiar to all are the cancers which develop in the scars of burns. They have been reported also in the scars of syphilis, blastomycosis, lupus vulgaris, and even lupus erythematosus. Right here, may I caution the physician to exercise care in the histologic examination. Knowing what we do about the close mimicry of cancer by pseudoepitheliomatous hyperplasia, I am confident that some of the so-called burn cancers, etc., have been diagnosed erroneously as such. In this light, unless the "cancerous" infiltration is far-reaching, or is extensively destructive and preferably metastasizing, the situation is indeed questionable. Here, I would put the emphasis upon the clinical circumstances when deciding as to cancer or no cancer. As a phenomenon that is developed secondarily, the lymphosarcoma which occasionally develops in granuloma fungoides should be cited here, but this is not important from the practical standpoint because the course and prognosis of the disease are similar whether sarcomatous or not.

This brings us to the crux of this presentation, namely, the cancerous conditions which may be overlooked—and by both the laity and the physician. I am happy to say that I have observed a growing consciousness on the part of the laity at least to the extent that our better class of society is learning first that "freckles and pimples sometimes turn to cancers," and that "they turn to cancer when one grows older." There is still urgent need, of course, for more and more publicity on this point, just as in all phases of cancer.

To you, as physicians, I am going to present the subject in an unorthodox manner, and will not complicate matters by subdividing it strictly according to precancerous, etc. I will arrange the topics after the fashion of a key, beginning with the simplest criterion, namely, the morphology of the lesion, and thereafter spread into the associated features as they are indicated for usefulness in diagnosis.

1. The lesion resembles a freckle. Of course, the commonplace freckle due to sunlight is usually readily distinguished by any intelligent person. However, the layman who is especially intelligent frequently recognizes some such freckles are different because they are darker than the others, are somewhat scaly and more sharply outlined. Occurring upon the exposed parts of the body, whether associated with the common freckle or not, these special freckles indicate the beginnings of a senile keratosis and, after that, squamous cell cancer. They are exceedingly common in dry, sunshiny regions where the light is highly actinic. It is the sandy type of individual who is particularly liable to this precancerosis, not necessarily the blonde. Dr. Hall[1], of Los Angeles, recently pointed this up, emphasizing the "blue-eyed, thin-skinned individuals, regardless of original hair color, and who sunburned repeatedly and are unable to develop a good tan." These peculiarities, he added, are referable to "certain racial stocks in which this particularly sus-

ceptible type of skin is hereditary." And, the tendency to cancer "is really a manifestation of the hereditary transmission of the inability to tan, which appears to be linked to the hereditary transmission of blue eyes." The Scotchman is, of course, the racial type which illustrates Dr. Hall's thesis.

A second type of freckle, denominated "lentigines" by the dermatologist, is quite different. The pigment is still superficial, as in ordinary freckle, but (1) some of the lesions are black, (2) the lesions are distributed regardless of exposure to sunlight, and (3) they develop early in life—even in very young children. They are nevi in fact and can develop into the potentially malignant (dermo-epidermal or junction) kind of nevus which in turn develops into malignant melanoma. These are innocent appearing lesions indeed which are masquerading on human skins.

2. The lesion resembles a scar. Suspicions arise that all is not well when a scar or morphea-like lesion, say on the back, progressively enlarges and when there is not any history of preceding injury. Under such circumstances the margin of the scar should be closely scrutinized to identify a thread-like, almost invisible pearly line (infiltration). It may be necessary to call upon the loupe for help. I am referring here to the morphea-like or cicatrizing epithelioma. This is a curio in the story of cancer, considering the fact that the cancerous disease regresses in the center of the lesion, being replaced by scar tissue. The lesion progresses slowly over a period of years and has the significance of the basal cell cancer that it is.

3. The lesion is a cutaneous horn. Such horns are of various sizes, but even the miniature ones have significance; even those which are only a few millimeters in length. The bases are commonly infiltrated by processes which are of the order of a senile keratosis, either with or without a consequent squamous cell cancer. Actually, they are senile keratoses whose summits have been covered by enormous cones of keratinous material. All cutaneous horns should be removed and checked histologically in respect to cancer.

4. Freckles plus telangiectases plus atrophy; Roentgen dermatitis: The recognition of the development of cancer in such lesions depends upon the ability to identify cancerous infiltration. Ulceration is, of course, of partciularly serious significance. The diagnosis of the nature of this lesion is seldom difficult because the history is so readily forthcoming. Of course, a histologic examination settles the question.

5. The lesion is a patch of more or less erythematous infiltration with more or less scaling: Under this heading, several cancerous or precancerous dermatoses fall, such as Bowen's disease, Paget's disease and arsenical keratosis. It would take us far afield to differentiate the members of this group of dermatoses, involving so much in the way of history, ulceration or non-ulceration, rapidity of progress and histology. For the purposes of any but the trained dermatologist, may I put it in the form of an axiom. In the case of well-outlined, slowly developing infiltrations which are located upon the trunk, and in which the better known dermatoses have been excluded (syphilis, lupus vulgaris, parapsoriasis, etc.), the possibility of Bowen's disease, arsenical keratosis and to a less extent Paget's disease, should be considered. It will be necessary to consult dermatologic texts, of course, in such a complicated situation. Fortunately, the histologic appearance is distinctive and often pathognomonic in this field.

6. The lesion is obviously leukoplakic: This condition is so familiar to all that I need not describe it in detail. I do wish, though, to point out that all cases do not progress to cancerous change. Although it is true that irritation of one or other kind predisposes to the development of a cancerous form of leukoplakia, there is something fundamental in the biology of the tissues which is necessary as an additional factor before cancer develops, if at all. On this basis, there is a certain school of dermatologists which reserves the term "leukokeratosis" for those cases which they judge

to be benign in nature. The decision between the two forms depends upon the acumen of the physician, and upon training and experience. If it is decided that the white thickening is extremely thin and superficial, and unaccompanied by changes below the epithelium, and that local irritation (carious teeth) could explain it, leukokeratosis is the preferable diagnosis. Conversely, any evidence of undue thickening points toward the precancerous type, and ulceration is, of course, an almost certain sign of malignancy. Once again, microscopic examination is invaluable in doubtful cases.

7. The lesion is a mole: As in the case of the freckles and lentigines, the problem is one of differentiation between those which are potentially malignant (dermo-epidermal or junction) and those which are not (intradermal). It is a difficult problem which commonly confuses even the most expert. In this paper, I can only indicate one or two sailent points in respect to the potentially malignant type. First and foremost, a slaty or blue-black color is a particularly bad omen. Second, the lesion may appear as an irregularly outlined pigmented patch which is quite flat at some places and variously thickened at others. The color tones range from pale brown to blue-black, in both the flatter and the infiltrated portions. A lesion such as this may exist for years before malignancy, namely, malignant melanoma, develops.

The onset of malignancy is signalled when some portion of the lesion proliferates. This is likely to proceed rapidly and terminate in ulceration. The proliferative parts need not be pigmented, i.e., are amelanotic, and such a circumstance signifies an anaplasia of the cells which is a bad omen indeed. I need not tell you of the early metastasis to regional lymph nodes, and the multitudinous metastases to viscera and skin through the blood.

These lesions always arouse turmoil in respect to treatment. Of only one point are we certain, namely, that if one of these blue-black lesions occurs upon a position which is subject to irritation, it should be excised widely at once. Under no circumstances should it be rubbed or even palpated firmly by the physician. X-radiation and radium therapy are useless. In the case of lesions which are not subject to undue irritation, each case must be judged individually; preferably, the opinion of a consultant or of a tumor board in a hospital should be secured. If excision is decided upon, it should be practiced widely, meaning a margin of an inch if the anatomic circumstances permit.

The physician should be alert to the sinister possibilities of reddish-brown lesions in the nail bed. The outlook is favorable in the presence of exquisite pain, because there is a possibility of glomus tumor (a benign vascular lesion). Time and again, such lesions are malignant melanomas in the making (melanotic whitlow).

8. Miscellaneous consideration: An elephantiasis of the ankles is sometimes the outstanding presenting symptom in Kaposi's sarcoma. When definite tumors are present, the diagnosis is not difficult, but in the absence of such, only the hemorrhage and pigmentation of the skin may save the day in the diagnosis. In short, in the presence of hemorrhage and pigmentation upon an elephantiasic foot, Kaposi's sarcoma should be considered in the differential diagnosis.

A scleroderma-like thickening of the skin of the chest sometimes occurs following amputation of the breast for cancer, the well-known cancer en cuirasse. The presence of an erysipelatoid flush differentiates from scleroderma.

Xeroderma pigmentosum is excessively rare, congenital, and manifests itself in its earliest stages as a generalized exfoliative dermatitis. Multiple cancers of either basal or prickle cell type develop invariably upon a skin which resembles a huge x-ray dermatitis.

Finally a message to the general pathologist in respect to pseudo-epitheliomatous hyperplasia. It would appear that epidermis has a capacity for regeneration and for response to certain other stimulating forces which is not matched comparably by most other epithelial surfaces. In any event, the

histology of squamous cell cancer can be mimicked to such an extent that the erroneous diagnosis of cancer has been made in such simple lesions as pyoderms; however, chronic ulcerative and/or suppurative lesions like blastomycosis, lupus vulgaris and late syphiloderms exhibit it most often. Philpot[2] has recently pointed out that granuloma inguinale masqueraded as cancer in one of his patients. The pathologist must be wary indeed in diagnosing squamous cell cancer when accompanied by ulceration and suppuration of the skin.

The motley assemblage of masqueraders here discussed is not designed to impart an education in dermatology to you. It has been my attempt to help us penetrate the disguise of these malicious masqueraders on the skin, or if not that, at least to arouse your suspicions of cancer in the future when you meet some of these freckles and moles, et al. I have indicated simply a scaffolding into which you may build the rest of the structure in the usual medical manner. While you are filling in the chinks and crevices, do not forget that in the case of the skin, tissue is available for histologic examination in a way that is almost unique in medical practice. The comparatively simple performance of a biopsy may fill in such a large chink that the others will automatically disappear.

REFERENCES

[1]Hall, A. F.: The Relationship of Sunlight, Complexion and Heredity to Carcinogenesis of the Skin. (In press, 1948.)

[2]Philpott, O. S.: Pseudoepitheliomatous Hyperplasia Due to Granuloma Inguinale. Arch. D. & S., 56:669-675 (Nov.), 1947.

THE TREATMENT OF CARCINOMA OF THE URINARY BLADDER

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Cancer of the bladder remains one of the most difficult of all cancers in its refractoriness to treatment. Despite the advances of treatment of cancer in other portions of the body, the five-year cure rate for urinary bladder carcinoma is low; and the period of life of untreated and treated carcinoma is little different.

One would believe that a carcinoma which brings the patient to the doctor early, since hematuria is an early and frequent symptom of this disease, would lend itself to curative influences more readily than other "silent" cancers. Furthermore, the lesion is recognized by relatively simple means—i.e., cystoscopy and cystography—and this should be a factor in instituting early curative treatment. But such is not the case. Moreover, the problem in treatment is not only extirpation of the disease, but also a provision for diversion of the urinary stream.

Until the past few years this problem has led to almost insurmountable difficulties and the urologist has been inclined to place his reliance upon the radiologist, with deplorable results. The x-ray and radium therapy which has been given, often converting the patient with a relatively mild, occasionally bleeding, slow growing lesion causing moderate invalidism, into one with a shrunken, scarred bladder who spends most of his waking hours (and there are few when he is not awake) in a futile effort to pass a few drops of scalding urine. For example:

G. M., aged 66 years, had a diagnosis of grade IV carcinoma of the urinary bladder. He was treated elsewhere by cystoscopic fulguration and implantation of six radon seeds. He subsequently received high voltage x-ray therapy in divided courses, a total of 5,500 r being given. Results: (1) A "dead" left kidney. (2) Bladder capacity 5.0 c.c's. His chief complaint was lack of sleep. He was advised to have a cystectomy which was consummated. Pathologic examination of the tissue revealed no evidence of carcinoma. It is obvious that this man was dying not from carcinoma but from the effects of its treatment, that is, lack of sleep incidental to his severe frequency.

Marshall[1] in his study of the results of combined x-ray and radium therapy at Memorial Hospital gives 6 per cent five-year cures in bladder cancer. When one considers the potentialities for harm and the invalidism resulting therefrom with a rigid,

contracted bladder and vesical neck, one must say that "this is not enough."

What then is enough? It would seem that surgery with wide excision of the lesion and diversion of the urinary stream, if necessary, would offer a close approach to the ideal therapy. This would seem even more attractive when it is realized that carcinoma of the bladder is relatively slow to produce distant metastases. Why then has the profession been slow to adopt the technics for cystectomy and uretero-sigmoidostomy brilliantly fostered by Coffey? The technical aspects of the procedure, while considerable, are not insurmountable; rather the high primary operative mortality and the excessive postoperative morbidity, especially in the form of recurrent pyelonephritis, have been too extreme. Until recent years, even in the best hands, a 40 per cent operative mortality was to be expected while the incidence of pyelonephritis, infected hydronephrosis and pyonephrosis was so frequent as to be almost the usual rather than the exception.

The advent of the newer chemotherapeutic agents and antibiotics have, however, altered this gloomy prognosis to a considerable extent. Most important has been the development of the so-called "intestinal antiseptics," sulfasuxidine and sulfathalidine. It has been possible with their use, together with proper cleansing of the bowel and the use of a non-residue diet, to obtain an empty and approximately sterile bowel before surgery. Additional improvements in operative technic, with particular care to prevent angulation of the ureter and to preserve its blood supply together with retroperitronealization of the anastomosis, has also resulted in reducing the hazards of the procedure. At the present time the best figures vary from 5 to 12 per cent operative mortality while ensuing complications have correspondingly decreased. Another important gain has been in the decrease of hospital time necessary for therapy. Many cases are now completed in one stage and none requires more than two.

Many have hesitated in applying such an extensive surgical process to elderly patients. Such restraint is not as necessary if proper pre-operative and postoperative supportive therapy, transfusions, oxygen, etc., are combined with the technical improvements already noted.

A 73-year-old white male with history of painless hematuria, revealed by cystoscopy a growth about one inch in diameter in right side of the bladder very close to the vesical neck. Biopsy revealed carcinoma of the bladder, grade II. Cystectomy and bilateral uretero-sigmoidostomy was carried out in two stages following the usual preparations. In addition penicillin and streptomycin were given in large doses postoperatively. He made a complete, though somewhat prolonged, convalescence and now has resumed full activity nine months following surgery. During the first six months he had three attacks of left pyelonephritis, each of which responded within one to three days to streptomycin. For the past three months he has had no complaints.

Our personal experience has consisted of eight cases the past three years with one operative death. Of the seven surviving surgery, all are living one month to two years. All are not cured, of course. But all are reasonably comfortable, most of them completely satisfied, and herein lies the most cogent argument in favor of surgical treatment. It gives the longest, most comfortable period of life to these suffering from cancer of the bladder. It does not leave them with contracted, irritable bladders. It does not condemn them to a life of strangury and straining. It does allow them reasonable activity and adequate sleep. It does give as good or better chance of cure as radiation therapy. Unfortunately sufficient data has not accumulated to give accurate prognostic figures as to five-year survival rates but they can hardly be worse than those obtained by other technics.

More conservative surgery has been recommended for tumors occurring in the mobilizabile portion of the bladder, i.e., in the dome and in the wall above the trigone and away from the vesical neck. Segmental or partial resection of the bladder, removing the tumor with a wide cuff (½ to ¾") of normal mucosa has been frequently carried out. Others have even recommended partial resection in cases where

one ureter has been involved, with transplant of that ureter to the bowel, skin or back into the healthy portion of the bladder. Unfortunately the rate of recurrence is high and too many patients subsequently develop an inoperable lesion and die the excrutiating death we are trying so hard to avoid. It still maintains a field of usefulness in properly chosen cases, but these are quite limited in number.

Surgical diathermy or fulguration is in essence a manner of applying intensive heat to tissues. It has been found lacking in the treatment of malignancies elsewhere in the body and seems to us equally deficient in treating overt malignancy of the bladder. It is useful and specifically indicated for benign papilloma and, perhaps, very early papillary carcinomata. Where any degree of invasion has occurred, however, its role probably should be purely palliative.

Palliative surgical procedures are also available in extensive lesions where cystectomy is impossible. These are permanent cystostomy, cutaneous ureterostomy, and uretero-sigmoidostomy:

1. Permanent cystostomy is rarely satisfactory. It does not accomplish the main essential for relief, i.e., diversion of the urine. In addition it introduces an additional irritant in the form of a drainage tube. It is a care to the patient and family. In short, it should rarely be resorted to, save in cases of uncontrollable hemorrhage or other emergency.

2. Cutaneous ureterostomy is easy to perform and carries a relatively low operative mortality. It does accomplish the primary aim of diversion of the urine. It is, however, a great care to the patient and a great psychological burden to a great many. In addition, contrary to popular opinion, it carries a high postoperative incidence of pyelonephritis and such complications as retraction or stenosis of the ureteral stump. It is a useful procedure in cases where the ureters are too dilated to allow uretero-sigmoidostomy or where the patient's general condition prohibits more extensive surgery.

3. Uretero-sigmoidostomy is the procedure of choice whenever feasible.

While formerly only normal ureters were considered suitable for transplantation to the bowel we now feel we may successfully employ ureters whose diameter does not exceed 3/8-inch.

It is worthy of note that there are several remarkable cases on record where regression of the bladder growth has followed simple ureteral diversion of the urine.[2]

Summary

1. Radiation therapy has been disappointing in the treatment of carcinoma of the bladder. The rate of cure has been low and the complications of treatment have frequently made the cure worse than the disease.

2. Improvements in chemotherapy, preoperative care, and operative technic have made cystectomy and uretero-sigmoidostomy operations reasonably safe with minimal complications.

3. Diversion of the urinary stream insures the patient of the longest period of comfortable life of any of the forms of treatment.

Conclusion

Surgical treatment of most cases of cancer of the bladder appears to be the procedure of choice at the present time.

REFERENCES

[1]V. F. Marshall: New York State Journal of Medicine, 48:875-76, April 15, 1948.

[2]Edwin Davis: J.A.M.A., 137-450-453, May 29, 1948.

EFFECTS OF ALTITUDE ON THE HUMAN BODY

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The effects of altitude on the human body as seen in the Rocky Mountain region are a greatly confused picture. Daily, those who practice in the magic "mile high" region hear of signs and symptoms which are attributed to the effects of altitude. Many medical men, both in this region and in the country at large, place a great deal of emphasis upon the dire effects of altitude upon the human body. Very little has been written in this region on the subject and so many secondary factors enter in, that I feel sure that many time-worn conclusions are not scientifically sound.

A great deal of our misinformation comes because we refer to aviation medicine for our data. Here it must be pointed out that aviators and those traveling by air are never aloft enough to become acclimated. Inasmuch as acclimation plays a major role in the consideration of conditions arising from altitude, the problems of the aviator, and of the population living in areas of marked elevation, are entirely different. To keep the record straight, "altitude" in the Rocky Mountain region, does not start below 7,000 feet.

Basically, the problems of altitude are problems of reduced oxygen tension. Secondary symptoms of lowered barometric pressure are not noted in the altitudes encountered in this area. The average unacclimated person can withstand an altitude of 18,000 feet for one-half hour, although he may show signs of oxygen want. With our maximum altitude of 14,000 feet and some degree of acclimation, we would expect to run into very few symptoms, solely related to altitude, among healthy individuals.

The oxygen deficiency, which causes the symptoms related to altitude sickness, develops in the following manner. The act of respiration is essentially involuntary and controlled by two mechanisms. By far the most important control is the effect of the accumulation of carbon dioxide in the blood. This in turn stimulates the respiratory center in the medulla oblongata. Inasmuch as the rate of production of carbon dioxide and the need for oxygen by the tissues is closely parallel, this mechanism presents no problem at lower altitudes. In high altitudes, the situation is different, since oxygen tension in the blood is lowered without a corresponding increase in the carbon dioxide in the blood. At altitudes above 12,000 feet the oxygen tension falls low enough to stimulate the carotid body which is controlled not by carbon dioxide, but by the presence, directly, of anoxia. An increase of the respiration rate by this means causes a "washing out" of carbon dioxide from the blood which, in turn, causes dizziness, tingling of the extremities, titanic spasms, and finally collapse.

The "washing out" or decrease of carbon dioxide in the blood disturbs the normal hydrogen ion concentration in the blood, with a resultant alkalosis. A further complicating factor is the inhibition of the normal dissociation of oxygen from the blood to the tissues in an alkaline state. Here again the picture is confused because the work above recorded was done on completely unacclimated individuals.

The general symptoms of altitude or mountain sickness are nausea, headache, anorexia, dizziness, and weakness. Rate of ascent plays a large part in the development of the above symptoms and their severity. In one year of practice at 10,000 feet I was never able to satisfy myself that I had seen a condition which could accurately be called altitude sickness.

It has been conclusively proved that many of the so-called "collapse" conditions attributed to altitude are, in reality, psychogenic in origin. The inexperienced and apprehensive mountain travelers have a tendency to hyper-ventilate, causing a decrease in the carbon dioxide tension and resulting collapse. This mechanism can be controlled voluntarily by education and ex-

perience and the patient remains symptom-free, as demonstrated by experiments in the army.

There are many minor responses of the body to increased altitude, which are of little significance. The simple physiological adjustments of the body to altitude in the average normal individual are no more significant than the adjustment to any other change in environment. We often find special emphasis upon these symptoms, such as panting and increase in pulse, which are of no more significance than the lassitude and increased perspiration noted in adjusting to hot and humid environment. Indulging in physical indiscretions in either case would be to court disaster. The bracing mountain air plus the challenge of mountain tops have a tendency to contribute to physical excesses. Moderation and intelligence in the physical efforts of those who are not in good physical condition is imperative. Adequate time for acclimation should also be allowed.

Special effects of altitude are:

1. Heart—a definite increase in pulse rate is noted. There appears to be no demonstrable effect on the heart of unacclimated individuals up to 5,000 feet, at which time a depression of the T wave is seen. The administration of oxygen appears to restore the E.K.G. to normal. My personal experience leads me to believe that, with proper time for acclimation, 10,000 feet is quite safe.

2. Blood pressure—Here the literature appears to be quite confused. One of the most acceptable studies, conducted by Anthony J. Allegretti, and published by the Medical Bulletin of Veterans' Administration, would seem to indicate that one could expect to find a slight drop in blood pressure with increased altitude.

In my experience, the most important effects of altitude upon the body have not been mentioned in the literature. The first is the major adjustment of the mucous membranes of the nose and, to a lesser degree, the throat and bronchae to the extreme dryness in the air. A great deal of the crusting and distress noted can be relieved by the administration of mineral oil in the nostrils, especially at night, and allowing hard candy to dissolve slowly in the mouth. The second major cause of distress is the devastating effect of the sun's rays. In the rarified air, all exposed skin surfaces and the eyes should be carefully protected. The presence of a syndrome closely resembling "welder's flash" was frequently noticed, especially in the presence of snow.

The major problem of acclimation to altitudes is that of blood chemistry. The excellent work of Holdanee done on the Pikes Peak Expedition in 1927 has stood the test of time. He found that in the process of acclimation there was an increase in the number of red blood cells and of the hemoglobin within the cells. Contrary to the popular impression, this is accomplished in from two to four days in healthy individuals.

The symptoms of true altitude or mountain sickness are due to oxygen want. Didect oxygen inhalation will relieve the specific symptoms rapidly. Psychogenic factors seem to have a great deal to contribute to the condition as seen in the Rocky Mountain region, so that firm assurance of rapid recovery with oxygen should be stressed.

Summary

The problems of altitude as seen in the Rocky Mountain region and those of aviation medicine are greatly different. Acclimation which takes place in two to four days of mountain life greatly modifies the symptoms of mountain sickness. Greater stress should be placed on care of the skin and eyes, plus protection of the mucous membranes of the nose and throat. For those indulging in physical activities in the mountains a good physical condition and a period of acclimation are imperative.

REFERENCES

1. Allegretti, Anthony J.: "The Medical Bulletin of the Veterans Administration," 19:290, January, 1943.

2. Anderson, F. N.: "The Cyclopedia of Medicine," pp. 1035-1036.

3. Bauer, L. H.: "Tice's Practice of Medicine," 2:347, 1942.

4. Holdane, J. S.: "Physiological Reviews," 7:363, July, 1927.

5. Searle, C. W. A.: "Practitioner," 146:175, March, 1941.

6. "Physiology of Flight," A.A.F. Manual No. 25-2.

Case Reports

DICUMAROL THERAPY IN A PATIENT WITH MITRAL STENOSIS AND ARTERIAL EMBOLI

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The use of dicumarol in patients with mitral stenosis who throw arterial emboli has been reported [1,2]. Nevertheless, the following case report is of interest because of the duration of the dicumarol therapy, the effectiveness of the therapy, and the manner in which the patient served as his own control in regard to the therapy.

CASE REPORT

The patient was first seen in April, 1944, at the age of 29. He had had rheumatic fever at 5 years of age and had been in bed for six months. He was left with some heart involvement, but went through high school with no limitation on his activity. At the university, he was limited in his athletic activities. After leaving the university he had an office job. In 1941, he had a spell of rapid heart action lasting twenty-five hours with sudden onset and offset. For three months following this initial attack he had repeated attacks lasting two to eight hours. Then they became less frequent and he had only an occasional spell. From an electrocardiogram these spells were diagnosed as being auricular flutter, possibly auricular tachycardia. During the few months prior to his first visit, he had had several short spells of rapid and hard heart action. With the spells of rapid heart action there was moderate dyspnea, marked palpitation, and a choking sensation in the throat. The patient had had moderate shortness of breath on exertion for many years. It seemed no worse in the last year or two. Occasionally on exerting in cold weather and walking against the wind he had a burning sensation in his throat. Lips and fingernails became blue easily. There had never been any edema. A chronic cough had been present for years and on rare occasions he had brought up some blood-streaked sputum. Easy fatigue was an important complaint. The remainder of the history was not pertinent.

Patient was tall and thin (110 pounds). Examination was negative except for the cardiovascular system. Blood pressure was 120 systolic and 60 diastolic. Fluoroscopy revealed a marked right ventricular and left auricular enlargement. The first sound was accentuated at the apex. The pulmonic second sound was moderately loud, and the aortic second sound was faint. There was a moderately loud, high-pitched, systolic murmur at the apex, and a medium-pitched, faint, systolic murmur in the aortic area and third left interspace. Loud rumbling mid-diastolic and presystolic murmurs were present at the apex. A faint, high-pitched, early diastolic murmur was heard in the third left interspace next to the sternum. The electrocardiogram showed a right axis deviation, notched P-waves with high voltage in leads II and III, a P-R interval of 0.22 seconds, and a high R-wave in lead CF2.

The diagnosis at the time was inactive rheumatic heart disease with mitral and aortic involvement and spells of paroxysmal tachycardia. The patient was placed on quinidine gr. 3, three times a day, with some improvement. Because of some increase in dyspnea and the increase in the arrhythmia with exertion, he was also placed on digoxin. He continued to have frequent premature contractions and occasional short periods of tachycardia. On February 22, 1945, he coughed up a couple ounces of blood.

On March 22, 1945, he began fibrillating at a rate of about 110. He was put into the hospital where he remained three weeks, during which time he had a cerebral embolus, followed by an embolus to the right kidney, and was finally converted to regular rhythm by the use of 42 grains of quinidine in one day. Ten days following his return home, while on a regular rhythm, he had an embolus to the left kidney. He gradually improved and went back to work in a couple of months. He continued to take 3 grains of quinidine twice a day and digoxin. He had only an occasional cardiac irregularity of short duration.

On January 10, 1946, auricular flutter began. Patient was placed in the hospital, and after five weeks of futile therapy, was discharged on February 26, 1946, still fluttering. While in the hospital he was given quinidine in a dosage up to 63 grains a day, with and without digitalis, with no avail. An electrocardiogram taken at home on March 3, 1946, showed that the flutter had changed to fibrillation. On March 8, 1946, he had a severe cerebral embolus and was again put into the hospital. The same day, he developed abdominal pain and urinary evidence of kidney emboli. On March 11, dicumarol was started. The patient gradually improved and was discharged from the hospital on March 27, 1946. At this time the heart was controlled by digoxin, and on a dosage of 50 mg. of dicumarol a day, the prothrombin time remained about twice normal. Five days after leaving the hospital the prothrombin time became ten times normal and the patient developed leg petechiae and blood in the urine. He was taken off dicumarol and in a few days was much better. The dicumarol dosage was cut to 50 mg. five times a week and then to 50 mg. every other day. On this dosage the prothrombin time remained about twice normal and no arterial emboli occurred.

On October 12, 1946, seven months after starting dicumarol, the patient asked if he could stop the dicumarol, and he was permitted to do so. Twelve days later, on October 26, 1946, he again had a cerebral embolus, more severe than any he had had previously. Whereas the other cerebral emboli cleared with little evident residue, this one produced left hemiplegia. A prothrombin time taken the next morning was reported, patient 22 seconds, normal 20 seconds. Dicumarol was immediately begun again, and continued for twenty-seven months until the patient's death from congestive failure on February 6, 1949. During that time the patient had no other episodes of arterial embolism. The dosage of dicumarol varied between 25 mg. every day to 25 mg. one day and 50 mg. the next day. Prothrombin determinations were done every seven to twelve days, and on this dosage the patient's prothrombin times averaged 49

seconds, with the controls averaging 20 seconds. On only one occasion did any difficulty arise from dicumarol. In August, 1947, an epistaxis occurred which was not controlled by the usual means and the patient was given some vitamin K and 250 c.c. of whole blood. His prothrombin time at the time was 61 seconds, with normal, 20 seconds.

At autopsy, the heart showed severe mitral stenosis, tricuspid stenosis, and arotic insufficiency. The right ventricle was markedly hypertrophied. The atria were dilated and there were some small thrombi in the auricular appendages. The lungs and viscera showed marked chronic passive congestion. The liver showed moderate cardiac cirrhosis. The surfaces of the kidneys showed numerous deep, old, scarry indentations. The renal parenchyma underneath the scars was greatly shrunken. In the brain there was an old, cherry-sized cystic softening occupying the lateral and basal portions of the right frontal lobe and a somewhat larger, partly cystic softened area extending over most of the right basal ganglia.

Discussion

The following points are of interest in the case:

1. The onset of fibrillation in this patient resulted, within a few days, in frequent arterial emboli. These occurred in such number that it is difficult to see how he could have lived more than a few weeks or months without dicumarol therapy.

2. No arterial emboli occurred while the patient was under dicumarol therapy—a period of three years.

3. The only embolus during the three years following the beginning of dicumrol therapy was when the drug was stopped at the patient's request to see if it were really protecting him. A large cerebral embolus occurred twelve days after the drug was stopped.

4. Prothrombin time determinations were done every seven to twelve days and might possibly have been done at somewhat longer intervals with safety. Attempt was made to keep the prothrombin time at twice the normal. In this patient it required from 25 to 50 mg. of dicumarol daily.

5. Only two episodes of dicumarol overdosage occurred in the three years. Both were mild and easily controlled.

Conclusion

A patient is reported who was protected over a period of three years from arterial emboli by dicumarol therapy. Ambulatory treatment with dicumarol over long periods of time is feasible.

REFERENCES

[1]Wright, I. S., and Foley, W. A.: Use of Anticoagulants in the Treatment of Heart Disease, Am. J. Medicine, 3:718, (Dec.) 1947.

[2]Sprague, H. B., and Jacobsen, R. P.: A Case of Rheumatic Heart Disease With Periodic Arterial Embolism: Ambulatory Treatment With Dicumarol, Med. Clinics of North America, 32:1309 (Sept.) 1948.

TREATMENT OF MIGRAINE WITH DRAMAMINE

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Dramamine is being used successfully for treatment of migraine. The reason that this drug was used by me is that it has been successfully used for prevention of motion sickness, particularly sea-sickness. The major symptoms of sea-sickness are vertigo, nausea, vomiting, headaches; in many instances the outstanding complaint has been headache. There is essentially no difference in the symptomatology of migraine and motion sickness. It was an easy step to try Dramamine for treatment of migrainous symptoms.

I have successfully treated seven patients with it. These patients filled the major criteria for diagnosis of migraine.

DIAGNOSTIC SYMPTOMS

	Patient No.						
	1	2	3	4	5	6	7
1. Headache (intense)							
Unilateral	X	X	....	X	....	X	....
Bilateral	....	....	X	....	X	....	X
2. Nausea	X	X	X	X	X	X	X
3. Vomiting	X	....	X	....	....	X	X
4. Nervousness	X	X	X	X	X	X	X
5. Tremor	X	....	....	....	....	X	....
6. Prodromal Symptoms							
Scotomata	....	....	....	....	....	....	....
Irritability	X	X	X	X	X	X	X
Nervousness	X	....	X	....	....	....	X
7. Periodicity, relation to menses	X	....	X	....	....	X	....
8. Age at onset	18?	....	12	....	....	6	6

Cases 1 and 5 had all the major symptoms of migraine and these two cases received the major benefits. However, the drug did not abolish tremor during the attack.

By using Dramamine at the onset of prodromal symptoms, all the manifestations of the migrainous headaches were able to be aborted and the patients were able to resume normal activities almost immediately. All cases had been treated previously with usual medications and had received only slight, if any, relief.

The indications are that Dramamine is a useful drug in treatment of migraine headaches and it should be used and observed to see whether it will give lasting or permanent relief for symptoms of migraine. It also adds to speculation whether there is some involvement of the vestibular apparatus in migraine.

MUCINOUS CARCINOMA OF THE APPENDIX*

WITH IMPLANTATION METASTASES TO THE PERITONEUM

W. C. BLACK, M.D., H. R. McKEEN, M.D., and S. M. P. ASHE, M.D.
DENVER

Primary adenocarcinoma of the appendix is a very rare disease as shown by Woodruff and McDonald[1] who reviewed the surgically removed appendices at the Mayo Clinic between the years 1914 and 1938. These amounted to approximately 43,000. Of these they found only ten in which adenocarcinoma was present.

CASE REPORT

Mr. J. R., a 45-year-old white man, consulted one of us (H. R. McK.) in February, 1947, complaining of vague discomfort in the right lower abdominal quadrant relieved by bowel movements. There was no abdominal tenderness or rigidity and no palpable mass. He was advised to take a smooth diet and small doses of mineral oil. However, the abdominal discomfort continued and increased in extent so that the left lower quadrant was involved. He continued his work as a clerk in an office in Denver until February, 1948, when another examination revealed a greatly enlarged abdomen. Examinations of his blood and urine were done and the results were within normal limits, except for the erythrocyte sedimentation rate which was 45 mm. per hour (Westergren method). He was admitted to St. Luke's Hospital on February 15, 1948. The history taken then added no other information. Physical examination revealed a greatly distended abdomen in which a fluid wave was elicited. Dullness to percussion was present in the suprapubic area. Except for a few pus cells found in the urine, admission blood and urine examinations were not unusual.

*From St. Luke's Hospital, Denver.

Abdominal Roentgen ray films on February 17 and on March 2 showed fluid in the peritoneal cavity. Impressions of enlarged liver and spleen were recorded. Paracentesis was performed on February 18 and on March 7. The first resulted in the collection of approximately eight liters of thin blood-tinged fluid. About half that was drained on the second occasion. Microscopic examination of blocks of the sediment of the first specimen revealed only erythrocytes, granulocytes, and monocytes. In the second specimen small amounts of mucin and clumps of unusual vaculoated cells were found.

This man was febrile during his hospital stay. He had afternoon temperature elevations usually to about 100.5° F. He frequently was nauseated and vomited food on two occasions. He received supportive and symptomatic treatment including diuretics. On the 26th hospital day, while seated in a wheel chair, he became acutely dyspneic. He was returned to bed and died less than ten minutes later.

Postmortem examination was performed by Dr. W. C. Black, on March 12. The pulmonary artery and its right main branch contained a fresh embolus 2.0 cm. in diameter and 8.0 cm. in length. The abdominal cavity contained approximately 2,000 c.c. of dark-colored, clear fluid. The peritoneal surfaces were covered by nodular masses of neoplastic tissue which was grayish white and gelatinous. The omentum was completely replaced by the neoplasm. The splenic and hepatic capsules were covered by masses of tumor tissue. The pancreas was intrinsically normal, but it was completely embedded in neoplasm. The stomach bore neoplastic masses along its greater curvature and nodular masses of the tissue surrounded the pylorus.

None of these growths involved the inner parts of the gastric or duodenal walls; all were limited to the serosa. Tht entire small intestine showed neoplastic lesions studding the serosa, the mesenteric attachment and the mesentery proper. The large intestine presented similar neoplastic masses on the cecum, ascending, transverse and descending segments and in the mesocolon. The appendix was enlarged to 2.5 cm. in diameter and its length was 9.5 cm. It was firm

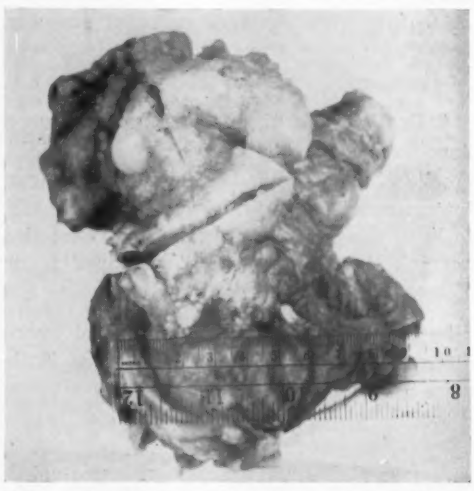

Fig. 1. The appendix with adherent terminal ileum. Abundant mucoid tissue surrounds the organ.

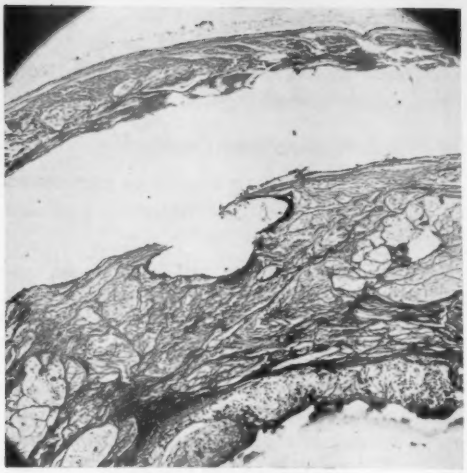

Fig. 2. A section of the wall of the appendix showing numerous large mucus-filled spaces. The lumen is to the right. X40.

and white and it lay securely anchored by abundant tumor tissue to the terminal ileum. (Fig. 1.) Dissection of its base showed a tubular out-pouching of the surrounding cecal wall. The latter was thickened by infiltration of gelatinous substance. The lumen of the appendix was obliterated just distal to its attachment to the cecal wall. The rest of the organ contained a mass of white gelatinous material in its lumen and in its wall. So extensive was the mural infiltration of the material that the layers either were destroyed or obscured by it.

The mucous membrane of the small intestine and large intestine, except for the appendiceal attachment in the cecum, was intact. The right common iliac vein contained fragments of firm thrombus.

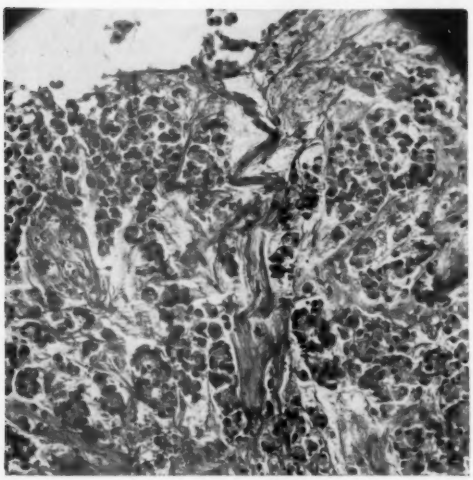

Fig. 3. A section from the wall of the ileum showing neoplastic cells arranged in columns and occasionally in alveoli. X125.

Microscopic examination of the embolus from the pulmonary artery proved it to be an antemortem thrombus as shown by alternating strata of fibrin, platelets and blood cells. The sections of the appendix (Fig. 2), neighboring cecum and the various organs of the peritoneal cavity showed great masses of basophilic intercellular material arranged in chaotic strands and cords in which many "signet ring" type cells of varying characteristics were found (Fig. 3). Mitotic figures and multinucleation were present infrequently in these cells. The nuclei showed great differences in size and shape and large numbers showed hyperchromaticism. In some locations abortive gland formation by these cells was present (Fig. 4).

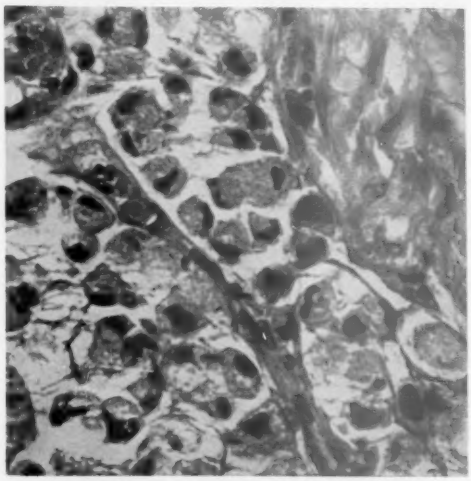

Fig. 4. Same as Fig. 3, showing two cells containing mitotic figures below and to the right of center. X600.

The neoplastic tissue had replaced all but thin layers of the muscularis and serosa of the appendix. In other situations it had penetrated the peritoneum from without inward and had split the capsular or muscular coats of the organs into thin laminae.

The immediate cause of this man's death was pulmonary embolism by a thrombus from the right common iliac vein. Probably the thrombosis was brought about by slowing of the venous blood stream from pressure exerted by the ascitic fluid.

Discussion

In a more recent analysis of the appendices examined at the Mayo Clinic, Uihlein and McDonald[2], divided the tumors of the organ into the following three groups: 1. Carcinoids, 88.2 per cent. 2. Cystic carcinomas, 8.3 per cent. 3, Adenocarcinomas of the colonic type, 3.5 per cent. The present case belongs in one of the latter two groups for these may give rise to peritoneal implanatation metastasis. Waugh and Findley[3], classified all appendiceal tumors into

two groups: Carcinoids, 90 per cent and adenocarcinomas, 10 per cent. Perhaps this is a more workable classification, for the cystic carcinomas described by Uihlein and McDonald probably are really adenocarcinomas which are less differentiated and less distinct structually than are the colonic type adenocarcinomas.

Perusal of the recent writings on appendiceal tumors complicated by peritoneal myxomatous growth reveals considerable difference of opinion both stated and implied as to whether this is a malignant or benign process. From a clinical standpoint it certainly is a malignant disease for it costs the patient his life. However, histologic and cytologic criteria of malignant growth are not always satisfied. Masson and Hamrick[4], and Hall[5], report cases of benign ruptured mucocele of the appendix followed by growth of mucus-secreting epithelium on the peritoneum. In fact, Grodinsky and Rubnitz[6] reported the spontaneous production of myxomatous "growths" on the peritonea of rabbits in which they caused an appendiceal mucocele to form by ligating it near its base. A later report by Rubnitz and Hermann[7], discounted the previous experiments by showing that the peritoneal lesions in their animals were only inflammatory reactions to the presence of irritating mucus.

The similarity between the peritoneal lesions arising from a perforated pseudomucinous cystadenoma of the ovary and from a perforated mucocele of the appendix has been known ever since Fraenkel's[8] comparison of the two conditions in 1901. Foot[9], and Novak[10], both wrote of the marked similarity of the epithelial cells of the pseudomucinous cystadenoma of the ovary and those of a benign appendiceal mucocele. The impression given by both of these authors is that either one of these conditions may be complicated by pseudomyxoma peritonei wherein active mucus-secreting epithelium may be implanted upon the peritoneum. In Ewing's book[11], however, nothing is said of the ability of histologically nonmalignant ovarian or appendiceal tumors to produce implantation peritoneal metastasis. Adenocarcinoma of the ovary or of the appendix are mentioned as being the conditions which may give rise to the condition called pseudomyxoma peritonei.

Summary and Conclusion

1. A case of primary mucinous carcinoma of the appendix with peritoneal metastasis is presented.

2. A review of recent publications on appendiceal tumor complicated by peritoneal myxomatous growths reveals a difference of opinion as to whether these may, or may not, represent histologically benign metastasis. Often the peritoneal growth is referred to as pseudomyxoma peritonei.

3. We conclude that the term pseudomyxoma peritonei should be applied to a condition in which mucus from a benign ovarian or appendiceal tumor contaminates the peritoneum and excites an inflammatory reaction. The term should not be applied to actively growing peritoneal implantation metastases of an histologically malignant tumor.

REFERENCES

[1]Woodruff, R., and McDonald, J. R.: Benign and Malignant Cystic Tumors of the Appendix. S.G.O., 1940, 71:750-755.

[2]Uihlein, Alfred, and McDonald, J. R.: Primary Carcinoma of the Appendix Resembling Carcinoma of the Colon. S.G.O., 1943, 76:711-714.

[3]Waugh, T. R., and Findley, David: Mucocele With Peritoneal Transplantation in Adenocarcinoma of the Appendix. Am. Jr. Surg., 1937, 37:518-525.

[4]Masson, J. C., and Hamrick, R. A.: Pseudomyxoma Peritoneal Originating From Mucocele of the Appendix. S.G.O., 1930, 50:1023-1029.

[5]Hall, D. P.: Pseudomyxoma Peritoneal. South. Surg., 1941, 10:264-270.

[6]Grodinsky, M., and Rubnitz, A. S.: Mucocele of the Appendix and Pseudomyxoma Peritoneal. S.G.O., 1941, 73:345.

[7]Rubnitz, A. S., and Hermann, H. T.: Experimented Appendiceal Mucocele, Myxoglobulinosis and Peritoneal Pseudomyxoma. Arch. Path., 1943, 36:297-310.

[8]Fraenkel, E.: Ueber das Sogennante Pseudomyxoma Peritonei. Muenchen. Med. Wchnschr., 1901, 48:965-970.

[9]Foot, N. Chandler: Pathology in Surgery. J. B. Lippincott Co., Philadelphia, 1945 ed. 1, pp. 112, 387-388.

[10]Novak, Emil: Gynecological and Obstetrical Pathology. W. B. Saunders Co., Philadelphia and London, 1947, p. 332.

[11]Ewing, J.: Neoplastic Diseases. W. B. Saunders Co., Philadelphia and London, 1941, ed. 4, pp. 515, 646-650, 672.

Estimation of the therapeutic effect of any drug on such a disease as human tuberculosis is extremely difficult. This is especially true in view of the chronicity of most forms of the disease and the known favorable response of the disease to proper diet, collapse therapy and rest in the absence of any treatment with drugs.—Archie H. Baggenstoss, M.D., William H. Feldman, D.V.M., and H. Corwin Hinshaw, M.D., Am. Rev. Tuberc., Jan., 1947.

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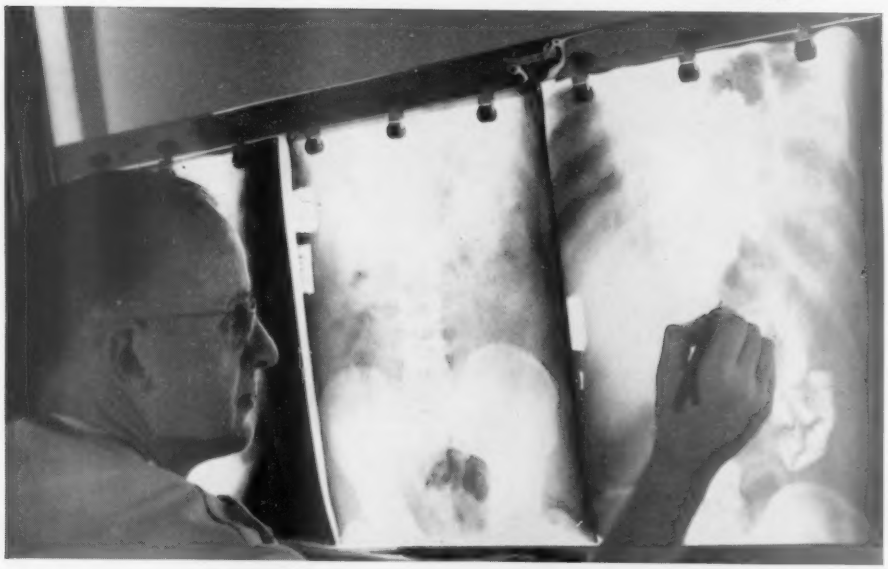

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Organization

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Directory Corrections

Several unfortunate errors which occurred in the Directory Supplement to the February issue of the Journal have been called to the attention of the Editors. They are listed below and it is suggested that readers either transfer the corrections to the appropriate pages of the Directory or clip the material out of this issue and paste it in one of the Directory's memorandum pages.

Colorado Springs

Dent, Roy F., Jr.—Specialty symbol should be **I*** instead of GP.

Denver

Bowers, Abern E.—Room number should be **1013** Republic Bldg. instead of 304 Republic Bldg.

Friedman, Gerald H.—Telephone number should be CHerry **8840** instead of CHerry 0887, and specialty symbol should be **S*** instead of Pd*.

Component Societies

CLEAR CREEK VALLEY MEDICAL SOCIETY

The Clear Creek Valley Medical Society has elected Dr. W. Lloyd Wright of Golden, President for 1950.; while Dr. Morgan Durham, Idaho Springs, and Dr. Louis Howlett, Golden, were elected Vice President and Secretary-Treasurer, respectively, for a one-year term. Drs. Douglas Collier, Wheatridge, and C. B. McCrory, Lakewood, were chosen to serve two-year terms as Delegate and Alternate to the State Society. The Society appointed Dr. Stephen L. Kallay of Lakewood CAP Chairman, and Dr. Wright is also acting as Publicity Chairman.

LOUIS HOWLETT, M.D., Secretary.

FREMONT COUNTY MEDICAL SOCIETY

Dr. J. G. Shoun, Canon City, was chosen President of the Fremont County Society at the annual meeting of the Society. Drs. S. R. Denzler and G. C. Christie, also of Canon City, were elected Vice President and Secretary-Treasurer. Dr. Christie was also appointed Publicity Chairman for the current year. The January meeting was a dinner meeting at which the Society entertained the local pharmacists. After dinner the movie, "Story of Wendy Hill," loaned by the State Health Department, was shown.

G. C. CHRISTIE, M.D., Secretary.

HUERFANO COUNTY MEDICAL SOCIETY

At its annual meeting January 9, the Huerfano County Medical Society elected the following officers for the current year: Drs. P. G. Mathews, President; N. S. Saliba, Vice President, and J. M. Lamme, Jr., Secretary. Drs. J. M. Lamme, Sr., and W. S. Chapman were chosen Delegate and Alternate, respectively, to the State Society. The Society also named Dr. Lamme, Jr., as chairman of the Publicity Committee, and Dr. Saliba was appointed to the Chairmanship of the CAP Committee.

LARIMER COUNTY MEDICAL SOCIETY

The Larimer County Medical Society at its annual meeting chose Dr. J. O. Mall, Estes Park, to serve as President for 1950; while Drs. Charles Carroll, Fort Collins, and R. E. Schmid, Loveland, were elected to the offices of Vice President and Secretary. Drs. Jackson Sadler and R. M. Lee, both of Fort Collins, were elected to two-year terms as Delegate and Alternate, respectively, to the House of Delegates of the Colorado State Medical Society: Dr. Blair Adams, Fort Collins, and Dr. P. E. Tramp, Loveland, will complete their unexpired terms as Delegate and Alternate. Dr. Paul Smith was appointed to the Chairmanships of both the Publicity and the CAP Committees.

R. E. SCHMID, M.D., Secretary.

LAS ANIMAS COUNTY MEDICAL SOCIETY

At the annual meeting, held January 12, 1950, the Las Animas County Medical Society held its annual election of officers, at which time the following physicians were chosen to serve for the current year: Dr. Lee J. Beuchat, President; Dr. Earl K. Carmichael, Vice President; Dr. James E. Donnelly, Secretary-Treasurer. Drs. Donnelly and Beuchat were named Delegate and Alternate, respectively, to the State Society for a two-year term. Dr. Donnelly was appointed Chairman of the Publicity Committee; and Dr. Carmichael, Chairman of the CAP Committee for the current year.

NORTHEAST COLORADO MEDICAL SOCIETY

Dr. Robert J. Ralston of Holyoke was chosen President of the Northeast Colorado Medical Society for the year at its regular meeting held on February 9, 1950, at Haxtun. Drs. Hershell P. Linton, Julesburg, was elected Vice President; and Dr. Kenneth H. Beebe, Sterling, was named Secretary-Treasurer. Drs. Edgar A. Elliff and John E. Naugle, both of Sterling, will complete their unexpired two-year terms as Delegate and Alternate, respectively, to the House of Delegates of the Colorado State Medical Society. Dr. T. M. Rogers of Sterling was appointed to the Chairmanship of the Publicity Committee; and Dr. Carl J. Manganero, also of Sterling, was named Chairman of the CAP Committee, each to serve a one-year term of office.

Following dinner at the I.O.O.F. Hall, Drs. Hugh A. MacMillan, Jr., and Mark S. Donovan of the Arneill Clinic, Denver, talked on "Surgical Diseases of the Lungs and Esophagus." Later there was a social hour at the home of Dr. Victor Davie. A meeting of the Northeast Auxiliary was held at the same time at the Davie residence.

KENNETH H. BEEBE, M.D., Secretary.

SAN JUAN BASIN MEDICAL SOCIETY

The following physicians have been elected to office in the San Juan Basin Medical Society for 1950: Dr. J. G. McKinley, Durango, President; Dr. J. M. Clark, Durango, Secretary-Treasurer. Dr. John Button and Dr. C. L. Mason, both of Durango, will represent the Society to the House of Delegates of the State Society as Delegate and Alternate, respectively. Dr. Leo W. Lloyd of Durango was appointed Chairman of the CAP Committee, and Dr. A. L. Burnett will continue to serve as Chairman of the Publicity Committee.

J. W. CLARK, M.D., Secretary.

WASHINGTON-YUMA COUNTY MEDICAL SOCIETY

Drs. V. E. Wohlauer and P. D. Keller of Akron were elected President and Vice President of the Washington-Yuma County Medical Society at its annual meeting, and Dr. A. T. Waski of Yuma was chosen Secretary-Treasurer. Drs. L. D. Buchanan, Wray, and C. J. Bennett, Yuma, were elected Delegate and Alternate, respectively, to the State Society. Dr. Keller was appointed to the chairmanships of both the Publicity and CAP Committees.

WELD COUNTY MEDICAL SOCIETY

The Weld County Medical Society has elected the following officers to serve during the current year: Drs. C. W. Sabin, Windsor, President; H. E. Haymond, Greeley, Vice President and President-elect; and F. J. Roukema, Secretary-Treasurer. Drs. W. A. Schoen, Greeley, F. D. Kuykendall, Eaton, and N. A. Madler, Greeley, will act as delegates to the Colorado State Medical Society; and Drs. S. W. Holley, R. T. Porter, and T. D. Peppers, all of Greeley, will serve as alternates. Dr. J. H. Darst is the new Chairman of the Publicity Committee, and Dr. Porter, Chairman of the CAP Committee.

INTERNATIONAL AND FOURTH AMERICAN CONGRESS ON OBSTETRICS AND GYNECOLOGY

The International and Fourth American Congress on Obstetrics and Gynecology meets in New York City, May 14 to 19, 1950. The program will consist of papers, clinics, motion pictures, scientific and technical exhibits. For the first time numerous foreign obstetricians and gynecologists have been invited to participate. Advance registrations are solicited for $10.00. Blanks may be obtained from Dr. Warren W. Tucker, Chairman, State Membership Committee, International and Fourth American Congress on Obstetrics and Gynecology, 1820 Gilpin Street, Denver 6, Colorado.

Obituaries

JAMES RAE ARNEILL, SR.

Dr. James Rae Arneill, Sr., one of Denver's best-known physicians and a national authority on urinalysis, died January 27, 1950, while vacationing in Winter Park, Florida.

Doctor Arneill resided at 741 Washington Street and maintained a clinic at 1765 Sherman Street.

Born in De Pere, Wisconsin, in 1869, Doctor Arneill received his B.S. Degree from Lawrence University in Appleton, Wisconsin, and then went to the University of Michigan where he received his Medical Degree in 1894.

Doctor Arneill taught on the University of

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Michigan faculty for six years from 1897 to 1903. The latter part of 1903 he moved to Denver and became a professor of medicine at the University of Colorado Medical School. He published a text on Diagnosis and Urinalysis in 1905. He was a contributor to the Reference Handbook of American Medical Sciences, and in 1930 was honored by the American College of Physicians by being made a member of its board of regents.

During his many years of practice in Denver, Doctor Arneill had been one of the most highly respected men in and out of the profession.

FRED H. CARPENTER

Dr. Fred H. Carpenter, well known Denver surgeon, died January 23, 1950, after a long illness.

Born in Louisville, Kentucky, Doctor Carpenter moved with his parents to the San Luis Valley. He attended Del Norte public schools and graduated from the University of Colorado Medical School in 1909. After serving his internship he practiced medicine in Center, Colorado, and in 1912 opened offices in Denver.

Doctor Carpenter closed his office in June, 1949, after 37 years of practice in Denver, interrupted only by his service as an Army Major during World War I.

He was a member of the Park Hill Masonic Lodge, Colorado Consistory No. 1, Denver Shrine, American Legion, and V.F.W. Doctor Carpenter also was affiliated with the Denver and State Medical Societies and had held offices in them.

Auxiliary

PRESIDENT'S MESSAGE

The Mid-Year meetings of the Auxiliary are just over as we go to press. The attendance was excellent. Fair weather stayed with us. Only two of the fourteen Counties of the State were not represented. We hope we will be receiving a report from them through the mails. In addition to your splendid cooperation and response there was such a heart-warming atmosphere of friendship, interest and team-work. Under such conditions work becomes pleasure. It is difficult to express my sincere pleasure. With harmony success is inevitable.

Interspersed with real business and work there was a generous sprinkling of social events, so necessary for good living. It was my privilege to have fifty-two members of the Board, County and State Past Presidents, as well as members of the Advisory Committee, as guests for tea. The luncheon following the Workshop Conference will long be remembered. Likewise, the dinner-dance. I am deeply indebted to many of you who so efficiently and beautifully assumed the responsibilities of detailed arrangements.

The Work-Shop Conference

The Conference was a new adventure on our agenda. It gave your State Chairmen opportunity to offer concrete ideas for guidance and direction. We hope for better coordination of objectives. The success of the Conference can be measured by the year's accomplishments next fall. There have been many requests for a repetition of Conference meetings.

Auxiliary Accomplishments

1. We continue in growth—both in membership and our expanded program of activities.
2. We are associating ourselves with all health organizations, such as Tuberculosis Association,

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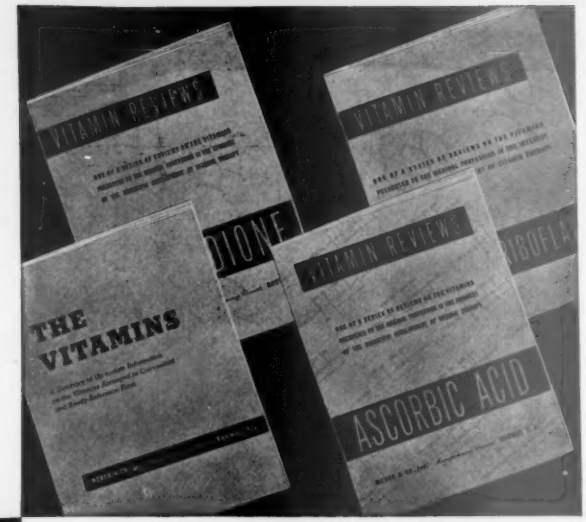

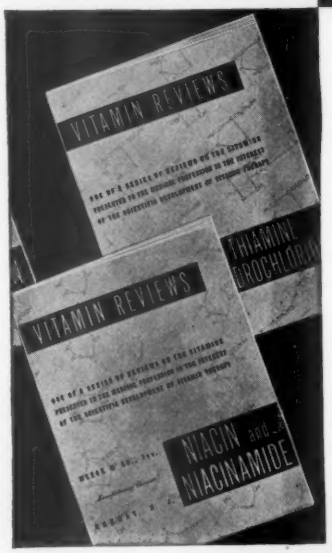

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Cancer Society, Crippled Children Drive, Child Welfare, White House Conference for Children, State Nurses Association, Red Cross, Community Chest, Heart Association, etc.

3. We are now a member of the Colorado State Health Council. Your President serves on the Executive Committee and Mrs. Harry Gauss, your President-Elect, serves on the Board of Directors.

4. Many County Auxiliaries are sewing for their hospitals and making cancer patient dressings and supplies.

5. Mrs. L. E. Daniels, assisted by Mrs. Louis Lee, both of Denver, have done an outstanding job as exhibit chairmen for the Colorado Cancer Society. Thus far fifteen exhibits at various conventions have been displayed. They have distributed over 19,000 pieces of literature.

6. We have awarded nine nurse scholarships in the several accredited schools of nursing.

7. The Health Education Committee has a list of fifty health films available to any organization upon request for programs. These films have been pre-viewed and carefully selected. There is also a supply of good health education literature available.

8. Today's Health, our official national magazine, has a subscription list of over 250 in our state this year. Most counties sent gift subscriptions to Junior and Senior High Schools and Superintendents of Schools.

9. Several counties are expanding the services of their established "Loan Closets." We wish more could sponsor a medical loan closet. This is a valuable project in that it furnishes equipment needed for the care of the sick in the home.

10. Denver County Auxiliary under the leadership of Mrs. Kenneth C. Sawyer, is proving itself a real asset to its community. With a membership of 425 and a good percentage actively engaged in Auxiliary work, they represent an organization of achievements. Among other services they have contributed a total of $500.00 for various health education and philanthropic projects.

It's Later Than You Think

The twenty-seventh annual meeting of the Woman's Auxiliary will be held in San Francisco, California, June 26 to 30, 1950. Headquarters will be at the Hotel Fairmont. Hotel reservations will be handled by Dr. William H. Rustad, Convention and Tourist Bureau, Civic Auditorium, San Francisco. This should be done immediately.

Anyone going to Convention will please notify your State President. We will want to designate several members as official delegates to the National Convention.

Have you paid your state dues to the State Treasurer, Mrs. J. C. Wiedmann? Her address is 4157 South Elati, Englewood, Colo. National deadline is March 31. Remember, National does not accept delinquent dues.

Colorado State Medical Society

The Auxiliary is enjoying a close liaison with the State Medical Society. We could not ask for more cooperation. It is gratifying to know we are having a year of accomplishments. We want to continue to be the most important ally of the Society, especially in helping to promote better public relations. As of December, a resume of the minutes of the meetings of the Public Policy Committee is now sent to the State

"Nowhere in medicine are more dramatic therapeutic effects obtained than those which follow estrogen therapy in the girl who has failed to develop sexually. A daily dose of 2.5 to 3.75 mg. of 'Premarin' given in a cyclic fashion for several months may bring about striking adolescent changes in these individuals."*

* Hamblen, E. C.: Some Aspects of Sex Endocrinology in General Practice, North Carolina M. J. 7:533 (Oct.) 1946.

"PREMARIN"®

Estrogenic Substances (water-soluble) also known as Conjugated Estrogens (equine).

"Premarin"—a naturally conjugated estrogen—long a choice of physicians treating the climacteric—has been earning further clinical acclaim as replacement therapy in hypogenitalism.

In the treatment of hypogenitalism, "Premarin" supplies the estrogenic factors that are missing, and thus tends to eliminate the manifestation of the hypo-ovarian state. The aim of therapy is to develop the reproductive and accessory sex organs to a state compatible with normal function.

Four potencies of "Premarin" permit flexibility of dosages: 2.5 mg., 1.25 mg., 0.625 mg., and 0.3 mg. tablets; also in liquid form, 0.625 mg. in each 4 cc. (1 teaspoonful).

While sodium estrone sulfate is the principal estrogen in "Premarin," other equine estrogens...estradiol, equilin, equilenin, hippulin...are probably also present in varying amounts as water-soluble conjugates.

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WANTADS

MEDICAL LITERARY RESEARCH BUREAU
Information, bibliographies, abstracts, manuscripts prepared from old and current medical or allied literature. Translations and photostatic copies provided. Ample reference facilities. Reynolds Hayden, M.D., Director (Captain, Med. Corps, U.S.N., Ret.), 5411 Potomac Ave., N.W., Washington 16, D. C.

YOUNG DOCTOR looking for a place to locate in Colorado. Finishing a two-year general practice residency at the University of Colorado Medical School. Available July 1, 1950. Dwight C. Dawson, DExter 8618.

Auxiliary President. We are privileged generous space in the Rocky Mountain Medical Journal each month. During the mid-year meetings, officers and members of the board, by invitation, attended a pre-convention policy and planning meeting of State and County Medical Society Presidents and Secretaries and CAP Chairmen. It served as an orientation meeting for the Auxiliary. A better understanding of the Society's projects and legislative program is helping us to coordinate all of our efforts in the counties.

Do You Know That:

1. Your CSMS is recognized Nationally as one of the outstanding and most progressive Medical Societies?

2. It ranks first in the distribution of educational literature?

3. The purse-sized blue leaflet "It's Your Pocketbook" was originated by your Medical Society? It is receiving favorable comments throughout the nation and many other States are now using it as effective literature in their Educational Campaign against Compulsory Health Insurance.

4. Your CSMS ranks third in the payment of dues? Colorado doctors responded—92.2 per cent.

5. It ranks ninth Nationally and first west of the Mississippi in securing endorsements against Ewing's plan?

6. Twenty of the twenty-six County Medical Societies have no delinquencies in the payment of membership dues?

7. The CSMS enjoys a superior rating and relationship with the A.M.A.? A recent Denver Post article with daring headlines made conflicting impressions on the public. The A.M.A. does recognize that the CSMS is earnestly attempting to find a solution for better medical care for everyone without Federal controy. The A.M.A. is now studying Colorado's proposal. The CSMS deserves our support. It is another step of progress. With progress there necessarily must come new ideas and changes. So long as we study and maintain standards that do not infringe upon the freedoms of the individual, we will meet the challenge of this great Nation. Let us all be alert and carefully explain these proposals to our friends who may be questioning them.

8. The CSMS Board of Supervisors and its functions has had National interest and consideration. Did you read the article "The Medical Grand Jury Plan" in the February issue of the Rocky Mountain Medical Journal?

Yours for continued successes,

MRS. THEODORE E. HEINZ,
President, Woman's Auxiliary to the Colorado State Medical Society.

As Publicity Chairman I appreciate the fine cooperation of all of the County Auxiliaries. We were so anxious to have as many as possible interested in attending the meetings in Denver.

Several of you have already sent in clippings from your local newspapers. All are gratefully received. Keep them coming!

We hope you found the meetings inspirational and interesting. The entire agenda was carefully planned for your benefit, so that our State Auxiliary work can be outstanding. This is a

WANGENSTEEN SUCTION SYSTEM

by PHELAN

DESCRIPTION Height 26 inches, diameter 15 inches. Weight approximately 35 pounds. Mounted on four Bassick casters.

The tank is hollow with a crowned head and inverted bottom. It is made of 16 gauge steel of welded and brazed construction throughout and finished in hammered aluminum lacquer, baked for durability.

On the top of the tank is a vacuum gauge reading in inches of mercury, a needle valve, a pump handle and a handle for moving the piece. IV tubing connects the tank to the drainage bottle.

SOME OF ITS USES

Decompression and drainage of stomach by connecting to nasal tube.

Gastrostomy decompression by connecting to gastrostomy tube.

Enterostomy decompression by connecting to enterostomy tube.

Aseptic decompression of bowel.

Withdrawal of blood in exchange transfusions.

ADVANTAGES

Silent in operation.

Safe for patient—no water used—patient's stomach cannot be flooded.

Impossible to develop positive pressure or excessive negative pressure.

Complete—requires no electrical or power connections.

A device requiring a minimum of attention—a time saver.

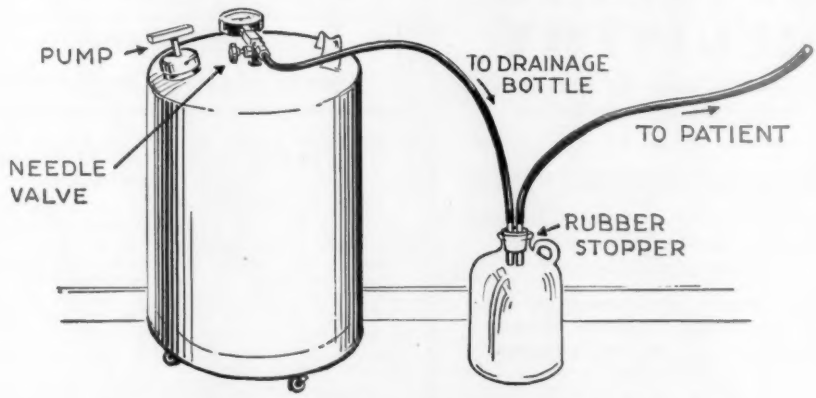
Easily portable—requires a minimum of space.

Economical—saving bottle replacements, etc.

Explosion proof.

In case drainage bottle is allowed to overflow, suction to the patient is not interrupted.

Hundreds of these units in use and not one request for service or replacement of parts.



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MINNEAPOLIS MINNESOTA

most important year for us. Let us go all out to achieve our goals!

The next three months will report summaries of the various county reports. You will find them interesting. Perhaps you will want to adopt some of the successful ideas in your own counties.

It was wonderful seeing so many of you in Denver.

MRS. RUSSELL JOHN EVANS,
Publicity Chairman, Woman's Auxiliary to the Colorado State Medical Society.

COLORADO
Medical School Notes

POSTGRADUATE COURSE IN GENERAL MEDICINE FOR GENERAL PRACTITIONERS

A postgraduate course is to be given at the University of Colorado Medical Center on March 23, 24, 25, 1950. This course in general medicine is planned for general practitioners and is being sponsored by the University of Colorado Department of Medicine in cooperation with the Colorado Chapter of the American Academy of General Practice. This is a two and one-half-day course devoted to metabolic diseases, cardiovascular and peripheral vascular disorders and the antibiotics. Special attention will be directed to the functions of the adrenal gland and the development of ACTH and Cortisone.

The course is open to all physicians who are members of their constituent medical societies. Credit will be given which will apply to the postgraduate requirements of the American Academy of General Practice.

The registration fee is five dollars ($5.00) and tuition will be fifteen dollars ($15.00). All applications and inquiries should be sent to the Director of Graduate and Postgraduate Medical Education, University of Colorado Medical Center, 4200 East Ninth Avenue, Denver 7, Colo.

COLORADO
State Health Department

1949 MORTALITY RATES REFLECT REVISED CERTIFICATION AND CLASSIFICATION PROCEDURES

Both the National Office of Vital Statistics and the Records and Statistics Section of the Colorado State Department of Public Health classify the causes of death according to the latest revision of the international List of Causes of Death in standard use in the particular year. For the years 1941 through 1948, the Fifth Revision (1939) was used, but for the deaths accurring in 1949 the Sixth Revision (1948) was adopted.

Reclassification of the causes of death under the Sixth Revision and revision of the medical certification section of the death certificate in 1949 brought some sweeping changes in the disease groupings and also in the method of selecting the cause of death to be tabulated when two or more conditions are jointly reported. Formerly the primary cause was selected according to prescribed rules giving precedence to one disease over another because of the character of the disease. Under the Sixth Revision, however,

in Mixed Bacterial Genitourinary Infections

Aureomycin is now rapidly becoming recognized as a drug of choice in the treatment of mixed bacterial genitourinary infections, particularly those in which *Escherichia coli* and *Aerobacter aerogenes* play a part. Intractability of a genitourinary infection is an especial indication for aureomycin.

Aureomycin has also been found highly effective for the control of the following infections: African tick-bite fever, acute amebiasis, bacterial and virus-like infections of the eye, bacteroides septicemia, boutonneuse fever, acute brucellosis, Gram-positive infections (including those caused by streptococci, staphylococci, and pneumococci), Gram-negative infections (including those caused by the *coli-aerogenes* group), granuloma inguinale, *H. influenzae* infections, lymphogranuloma venereum, peritonitis, primary atypical pneumonia, psittacosis (parrot fever), Q fever, rickettsialpox, Rocky Mountain spotted fever, subacute bacterial endocarditis resistant to penicillin, tularemia and typhus.

AUREOMYCIN HYDROCHLORIDE LEDERLE

Capsules: Bottles of 25, 50 mg. each capsule. Bottles of 16, 250 mg. each capsule.
Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. of distilled water.

AUREO-MYCIN

LEDERLE LABORATORIES DIVISION AMERICAN Cyanamid COMPANY 30 Rockefeller Plaza, New York 20, N. Y.

the "underlying cause of death" as entered by the physician on the new form of death certificate is accepted as the cause to be coded and tabulated, after clarifying any obscurities by querying the physician.

Because of these innovations, the mortality statistics for specific diseases as tabulated for 1949 under the Sixth Revision of the International List will not be strictly comparable with those for 1948 and earlier years. In other words, the changes in mortality from specific causes as indicated by the tabulated data will include not only the actual changes in mortality from the particular diseases, but also purely statistical effects of revising the certification and classification procedures.

As a preliminary aid in analyzing the 1949 statistics in relation to those for earlier years, the National Office during 1949 tabulated a 10 per cent sample of the death certificates for the United States according to both the Fifth and Sixth Revisions of the International List. From these tabulations, comparability ratios were computed to indicate for the various causes the part of the observed change in the mortality figures which is attributable solely to revisions in the list and the coding procedure. Although the differences assignable to these statistical factors are very slight in some disease categories, they are large in others. Illustrative ratios are presented in the table.

The comparability ratios obtained from the 10 per cent sample and final ratios which will be based upon the complete tabulations for 1949 will be valuable tools in correctly interpreting mortality trends for periods extending from the 1940's into the 1950's.

The following mortality rates, computed on an annual basis, were obtained from 10 per cent samples of the death certificates received in the National Office of Vital Statistics in the first eight months of 1948 and 1949. (Deaths per 100,000 estimated population.)

Cause of Death	1948 Rates by Fifth Revision	1949 Rates by Fifth Revision	1949 Rates by Sixth Revision	Comparability Ratio*
Malignant neoplasms, including neoplasma of lymphatic tissues, etc	133.3	135.7	135.6	1.00
Tuberculosis, all forms	32.6	28.7	27.5	0.96
Syphilis and its sequelae	8.5	7.9	5.7	0.72
Heart diseases, all forms	330.1	323.3	355.6	1.10
Influenza	4.3	2.9	3.5	1.20
Rheumatic fever	0.7	0.5	1.5	2.85

Source: Current Mortality Analysis, Vol. 7, No. 8, Dec. 12, 1949 (National Office of Vital Statistics), Table 4.

*Ratio of deaths classified by Sixth Revision to deaths classified by Fifth Revision of International List.

SNAKE VENOM IN THE TREATMENT OF HIVES

Occasionally one encounters a case of hives which is resistant to all forms of treatment. Dr. Victor L. Cohen, of Buffalo, N. Y., has reported to The American College of Allergists that he has used snake venom empirically in eight such cases with good results. Snake venom has been used as a last resort in certain other allergic states, but Dr. Cohen could only cite one other author who had used snake venom in the treatment of hives. In this instance, the venom of another type of snake was used.

for a protein-rich diet, I.V.

When the patient can't eat protein foods, you can rebuild and maintain nitrogen balance intravenously with AMINOSOL. The source of AMINOSOL, animal blood fibrin, is one of the highest biologic value proteins. As a hydrolysate, AMINOSOL contains all the essential amino acids in the correct pattern for optimum tissue repletion.

Clinical usage has shown AMINOSOL may safely serve as the *only* intake of amino acids (2000 cc. daily for a 70-Kg. man) or as a dietary supplement in critical or prolonged illnesses (1000 cc. daily).

Stable for two years or more, AMINOSOL is sterilized by filtration and autoclaving. Rigid tests prove each manufactured lot pyrogen- and antigen-free. It is available in 250-cc., 500-cc. and 1000-cc. containers. A sure way to preserve the safety of AMINOSOL in venoclysis is to employ sterile, disposable VENOPAK* equipment—which has a strip of gum rubber tubing next to the needle adapter for easy injection of vitamin B complex or vitamin C during the infusion. For detailed literature on the AMINOSOL line of Abbott's parenteral solutions, take a moment now to drop a card to ABBOTT LABORATORIES, North Chicago, Illinois.

**Trade Mark for Abbott's Completely Disposable Venoclysis Unit*

5% Solution
5% with Dextrose 5%
5% with Dextrose 5% and Sodium Chloride 0.3%

AMINOSOL®

(ABBOTT'S MODIFIED FIBRIN HYDROLYSATE)

UTAH
State Medical Association

FIFTH ANNUAL MEETING, OGDEN SURGICAL SOCIETY

The Ogden Surgical Society, with the cooperation of the Utah State Medical Association, is pleased to announce the Scientific program of the Ogden Surgical Society for 1950.

Time: April 24, 25, and 26, 1950.

Place: Ogden, Utah. The Scientific Meetings will be held at the Orpheum Theater.

Program: The following doctors have been obtained as guest speakers: LeRoy Charles Abbott, San Francisco, California; D. L. C. Bingham, Kingston, Ontario, Canada; Alfred Blalock, Baltimore, Maryland; Guy L. Boyden, Portland, Oregon; George E. Burch, New Orleans, Louisiana; John Caffey, New York, New York; Michael E. DeBakey, Houston, Texas; Claude F. Dixon, Rochester, Minnesota; Frank H. Lahey, Boston, Massachusetts; George H. Gardner, Chicago, Illinois; C. B. Huggins, Chicago, Illinois; Henry Swan, Denver, Colorado.

Entertainment: There will be a public address at the Ogden High School, Monday, April 24, 1950, at 8:30 p.m. Dr. C. B. Huggins will be the guest speaker. Tuesday evening, April 25, an informal party for all who have registered, and their wives. Social events will be arranged each day for all of the ladies in attendance.

Registration: Make hotel reservations at once, through chairman of the registration committee, Dr. H. C. Strandquist, 801 Eccles Building, Ogden, Utah. Please state if your wife will accompany you.

This Scientific Meeting will replace the annual 1950 meeting of the Utah State Medical Association. We urge you to attend this outstanding meeting.

V. L. WARD, M.D.,
President, Ogden Surgical Society.

C. H. JENSON, M.D.,
President, Utah State Medical Association.

NEW METHOD FOR SMALL-POX VACCINATION

Ever since Jenner introduced inoculation of the mild cow-pox to prevent the appearance of the severe and often fatal human small-pox, the vaccination for small-pox has been done by scratching or pricking the virus into the skin of the patient to be vaccinated. J. G. Little, M.D., of Cleburne, Tex., has offered a new method to the members of The American College of Allergists. This new method has been entirely safe and free from complications and gives almost 100 per cent takes.

For the past five years, Dr. Little has been diluting the drop of virus that comes in the ordinary "vaccine point" up to one cubic centimeter and injecting one-fifth the amount into the skin of the patient. Dr. Little was confronted during the war with the problem of making a very limited supply of vaccine do for 1,300 Marsallese natives and so, "Necessity was again the mother of invention." So successful was the experiment that Dr. Little has been using this method on children ever since. In his private practice, he makes it a rule to test the immunity that his vaccination has produced and in every instance the tests indicated a high degree of immunity.

The Fifth Annual Meetings of The Ogden Surgical Society

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Michael E. DeBakey, Houston, Texas.
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We urge you to attend this outstanding meeting.

Sincerely yours,

V. L. WARD, M.D.,
President, Ogden Surgical Society
C. H. JENSON, M.D.,
President, Utah State Medical Association

NEW MEXICO
Medical Society

68TH ANNUAL MEETING, NEW MEXICO MEDICAL SOCIETY

The 68th Annual Meeting of the New Mexico Medical Society will be held May 4, 5, and 6, 1950, in Las Cruces, New Mexico. The outstanding program of speakers and their subjects arranged by the host, Dona Ana County Medical Society, includes:

Allen J. Enelow, member of the faculty of the Menninger School of Psychiatry and member of the Psychiatric Staff of Winter Veterans Administration Hospital, Topeka, Kansas, "Alcoholism: Problems of Treatment and Research;" and "A Psychiatic Viewpoint in the Practice of Medicine."

Russell J. Blattner, M.D., Pediatrician of Baylor University College of Medicine, Houston, Texas, on "Diagnosis and Therapy of Virus and Rickettsial Infections;" and "Meningitis."

Willard R. Cooke, M.D., Professor of Obstetrics and Gynecology, University of Texas Medical Branch, Galveston, Texas, "Moot Issues in Gynecology;" and "Dystocia."

Nathan A. Womack, M.D., Department of Surgery, University Hospitals, Iowa City, Iowa, on "Benign Lesions of the Breast;" and "Surgical Treatment of Peptic Ulceration."

J. S. Speed, M.D., Chief, Campbell Clinic, Orthopedist, Memphis, Tennessee, on "Treatment of Ruptured Intervertebral Discs;" and "Surgical Treatment of Difficult Nonunions of Long Bones by Means of Bone Grafts."

Henry M. Winans, M.D., Professor of Medicine at the Southwestern Medical Foundation, Dallas, Texas, on "The Significance of Pain;" and "Who Has Heart Disease?"

NEW MEXICO MEDICAL SOCIETY TO INVESTIGATE STATE INSTITUTIONS

The New Mexico Medical Society was recently granted the privilege by the Governor of the State to investigate the health facilities and medical care and treatment of persons in all State-supported institutions.

The request by the State Medical Society to inspect these State institutions was prompted by criticisms by a physician who has recently been removed from the hospital staff of New Mexico State Hospital, Las Vegas. This physician has made charges of mistreatment of patients and mismanagement of the hospital.

Dr. J. W. Hannett, President, New Mexico Medical Society, has appointed three committees to investigate the State institutions, as follows:

New Mexico State Hospital, Las Vegas, Dr. C. H. Gellenthien, Valmora; Los Lunas Mental Hospital, Los Lunas, Dr. A. S. Lathrop, Santa Fe; N. M. Intensive Treatment Center Hospital, Albuquerque, Dr. Alan Jacobson, Albuquerque.

N. M. Boys' Industrial School, Springer, Dr. Eric P. Hausner, Santa Fe; Girls' Welfare Home, Albuquerque, Dr. P. G. Cornish, Albuquerque; N. M. State Penitentiary, Santa Fe, Dr. H. M. Mortimer, Las Vegas.

State Tuberculosis Sanatorium, Socorro, Dr. G. S. Morrison, Roswell; State School for the Deaf, Santa Fe, Dr. R. E. MacQuigg, Albuquerque; N. M. State School for the Blind, Alamogordo, Dr. W. L. Minear, Hot Springs.

A written report of findings and recommendations of these committees will be submitted to the Governor of the State, to the various Boards in charge of the institutions, and to the New Mexico Medical Society.

N. M. M. S. CONFERENCE OF COUNTY SOCIETY PRESIDENTS AND SECRETARIES

The first Conference of County Society Presidents and Secretaries of the N. M. M. S., February 11, in Albuquerque, was attended by representatives from fourteen of the sixteen County Societies. Mutual problems and plans of the the State and County Societies were discussed and a greater understanding of the objectives of the Society as a whole was reached. Four excellent reports were given by the following committees: Basic Science, Rural Health, Legislative and Public Policy, and Public Relations. Mr. Dick Graham, Executive Secretary of the Oklahoma State Medical Association, was after-dinner guest speaker on the topic of "Medical Public Relations." Other speakers were Mr. John Simms, Jr., Speaker of the House of Representatives, on "Effective Lobbying," and Mr. Keen Rafferty, Secretary-Treasurer, New Mexico Press Association, "You and Your Local Editor." It is hoped that this conference will become an annual event.

Tuberculosis Abstracts

Issued Monthly by the National Tuberculosis Association

Vol. XXIII **MARCH, 1950** **No. 3**

Evidence that the practice of X-raying the chests of all patients admitted to general hospitals is an efficient means of discovering unsuspected cases of tuberculosis continues to accumulate. The procedure not only aids the physician and gives the patient the benefit of early diagnosis; it also protects hospital personnel and advances the control of tuberculosis in the community. ....

ROUTINE CHEST PHOTO-ROENTGENOGRAPHY IN BARONESS ERLANGER HOSPITAL, CHATTANOOGA, TENNESSEE

Early in 1946, Baroness Erlanger Hospital in Chattanooga accepted as a permanent loan from the State Department of Public Health in Tennessee photo-roentgen equipment for the purpose of doing routine chest roentgenograms of all persons admitted to the hospital. At that time, the Chattanooga-Hamilton County Health Department was operating a stationary photo-fluorograph for clinic use and a mobile unit for the roentgenographic examination of persons in industry, schools, and the community. The equipment placed at the general hospital, therefore, rounded out the case-finding program and made routine chest roentgenograms for the discovery of cases of tuberculosis available to another population group.

Procedure

The stationary 35 mm. photo-fluorograph in the health department clinic is used to examine contacts of known cases of tuberculosis, food-handlers, teachers, barbers and beauty operators, persons applying for employment in certain industries, patients referred by physicians, persons desiring roentgenograms because of symptoms or for some other reason, a few students referred from schools, and a miscellaneous group. The individuals included in this survey are designated the Health Department Clinic Group.

The groups surveyed by the mobile unit are classified as community, industrial, or school. The community group includes adults living in residential areas of Chattanooga and Hamilton County. The industrial group consists primarily of workers employed in manufacturing plants. In the school group are students 15 years of age or over. The three subgroups are combined as the Mobile Unit Group.

The plan to obtain chest roentgenograms routinely on all persons admitted to the Baroness Erlanger Hospital was not attempted at first. Employees and any nonpaying patients (primarily indigent), a few private patients, and persons referred from the emergency room were included in the first survey. This group of persons is designated the Hospital Group.

Analyses of the clinic and mobile unit groups are for the year 1946, and that for the hospital group is for the period April 1 through December 31, 1947. This report seems indicated because of the relatively high percentage of pulmonary tuberculosis discovered in the group examined roentgenographically on admission to the hospital.

Results of Photo-roentgen Examination From Three Types of Surveys, Chattanooga-Hamilton County 1946-1947

Group	Number Examined	Cases No.	Cases Pct.
Health department clinic, 1946	13,966	383	2.7
Mobile unit, 1946	14,293	290	2.0
Hospital unit, 1947	5,187	193	3.7
All surveys	33,446	866	2.6

Discussion

The highest percentage of cases of tuberculosis (3.7) was found in the hospital group, but this should not minimize the finding that 2.0 and 2.7 per cent of persons examined in the mobile unit and clinic groups had tuberculosis.* Surveys such as this have proved their value repeatedly during recent years. Routine roentgenographic examination of hospital admissions, however, has not received the attention it merits. The risk to the medical student, nurse, or hospital employee of cases of unrecognized tuberculosis in the hospital population has been noted, but all too often the exceptional opportunity for tuberculosis case finding provided by the hospital population has been overlooked. Unrecognized tuberculosis among hospital employees and patients imposes a responsibility upon the hospital that is difficult to ignore. It is interesting to compare the make-up of the hospital survey group and the health department clinic group. In no subgroup of the mobile unit group has tuberculosis been found to be higher than 2.7 per cent. There is no outpatient tuberculosis clinic at Baroness Erlanger Hospital, and patients are admitted for hospital and clinic

services for complaints other than tuberculosis. Except for diabetes, tumor, and venereal disease clinics (which might be expected to have considerable unrecognized tuberculosis), there was no special subgroup that contributed to the high percentage (3.7) of persons found with tuberculosis in the hospital population. On the other hand, the health department clinic examined such subgroups as contacts (5.5 per cent with tuberculosis), barbers and beauty operators (7.7 per cent), and patients referred by physicians (9.3 per cent), in all of whom cases of tuberculosis are discovered frequently. This makes it more apparent that routine chest roentgenographic examinations of patients admitted to general hospitals should be seriously considered as a responsibility of the hospital and its contribution to the tuberculosis control program.

The success of any tuberculosis case-finding program depends upon the finding of early cases of the disease. In the clinic and mobile unit groups 65 to 70 per cent of the lesions discovered were minimal in extent. It was surprising to find that among the hospital population examined, 92 per cent of the lesions discovered were classified as minimal. In only 7 per cent of the patients were the lesions moderately advanced, and in only one per cent were the lesions far advanced. Of the total number of cases of tuberculosis discovered, 21 per cent were active lesions of minimal extent. The amount of tuberculosis found among young adults was high in the hospital group.

With the advent of photo-fluorography it was expected that many general hospitals would take advantage of this economical technic and adopt chest roentgenograms as a routine procedure. This has not occurred. While mass radiographic procedures are taken for granted in other population groups, there still seems to be some reluctance to use routine chest roentgenography on general hospital patients. This reluctance is difficult to understand. It appears that this one population group has been handed to those seeking out unsuspected cases of tuberculosis in the community "on a silver platter."

Routine Chest Photo-roentgenography in Baroness Erlanger Hospital, Chattanooga, Tennessee, Paul M. Golley, M.D., The American Review of Tuberculosis, September 1949.

*Editor's note: These percentages refer to reinfection type tuberculosis, but it should be noted that this does not mean that all cases were clinically significant.

The Book Corner

New Books Received

Brucellosis (Undulant Fever), Clinical and Subclinical: By Harold J. Harris, M.D., F.A.C.P., with the assistance of Blanche L. Stevenson, R.N. Foreword by Walter M. Simpson, M.S., M.D., F.A.C.P. With 111 illustrations, 12 in full color. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York. Second Edition, Revised and Enlarged. Price, $10.00.

Primer of Allergy, a Guidebook for Those Who Must Find Their Way Through the Mazes of This Strange and Tantalizing State: By Warrent T. Vaughan, M.S., M.D., Richmond, Virginia. With Illustrations by John P. Tillery. Third edition. Revised by J. Harvey Black, M.D., Dallas, Texas. The C. V. Mosby Company, St. Louis, 1950. Price, $3.00.

Brain and Behaviour: Induction as a Fundamental Mechanism of Neuro-Psychic Activity, an Experimental and Clinical Study With Consideration of Educational, Mental-Hygienic and General Sociological Implications: By N. E. Ischlondsky, M.D., New York. With 46 Illustrations. The C. V. Mosby Company, St. Louis, 1949. Price, $7.00.

Quinidine in Disorders of the Heart: By Harry Gold, M.D., Professor of Clinical Pharmacology at Cornell University Medical College, Attending-in-Charge of the Cardiovascular Research Unit at the Beth Israel Hospital, Attending Cardiologist at the Hospital for Joint Diseases, Managing Editor of the Cornell Conferences on Therapy. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers. Price, $2.00.

Book Reviews

The Doctor Wears Three Faces: By Mary Bard. Three faces wears the doctor: when first sought an angel's; and a god's the cure half wrought; but when, the cure complete he seeks his fee, the devil looks less terrible than he.—Anonymous. J. P. Lippincott Company, Philadelphia and New York. Price, $3.00.

Because of the dash and verve with which it is written, at the beginning the reader is reminded of the style of Betty MacDonald's The Plague and I. But as the reader progresses through what is really a collection of thinly related informal essays there is a change of reading motive. Interest is commanded and retained by the compelling force of the author's poignantly sympathetic identification of herself with the lives of the persons about her. For one who was an advertising woman, she is astonishingly humble in her observation of other people. The book is amusing, entertaining and just sufficiently similar in its content to the experiences of any other doctor's wife to be convincing and just different enough to be refreshing. It is good, quick, easy reading and excellent relaxation for doctor and/or doctor's spouse.

MINDELL W. STEIN.

Oral and Dental Diagnosis, With Suggestions for Treatment: By Kurt H. Thoma, D.M.D., F.D.S.R.C.S., Brackett Professor of Oral Pathology, Harvard University, Boston, Mass. With Contributions by Henry Goldman, D.M.D., Head of the Dental Department, Beth Israel Hospital, Boston, and Fred Trevor, D.M.D. Third edition. Cloth. Price, $9.50. Pp. 563, with 776 illustrations. W. B. Saunders Company, 218 W. Washington Sq., Philadelphia 5; 7 Grape St., Shaftesbury Ave., London, W.C.2, 1949.

The third edition of Oral and Dental Diagnosis is a completely rewritten book with over a hundred new illustrations to depict more accurately the symptomatology of disease and the technics of examination. The objective is the same as that which motivated the original writing of the book; to present for each disease entity a clinically complete diagnostic description, with technics of history taking, physical examination and laboratory tests. Data is also given on etiology, pathologic development and historic changes in relation to evident symptoms so that diagnosis may be both effective and inclusive.

The new materials include the fluorides for propylactic treatment, subgingival curettage in periodontal disease, gingivectomy in periodontal disease, treatment of intrabony pocket, treatment of glossodynia and treatment of fractures of the maxillae. In "Diagnosis of Fractures of the Teeth and Jaws," the treatment of fractures of the teeth and jaws seems to be treated too lightly. Less than two pages are devoted to the treatment and eight illustrations. Plastics and palatal splints are not mentioned. This book is a must for every dental office and student and a worth while addition for the physician—J.A.M.A.

Psychosomatic Medicine, The Clinical Application of Psychopathology to General Medical Problems: By Edward Weiss, M.D., Professor of Clinical Medicine, Temple University Medical School, Philadelphia; and O. Spurgeon English, M.D., Professor of Psychiatry, Temple University Medical School, Philadelphia. Second Edition. W. B. Saunders Company, Philadelphia and London, 1949.

This book covers a timely field which should be understood by every doctor of medicine, whether he practices a specialty or not. The psychosomatic origin of symptoms has come to recognition in every department. The authors have attained national recognition and are singularly well equipped to produce this valuable book. It is easy and pleasurable reading, clarified by ample case histories, clearly and casually described, with suitable analysis of each. Thus it may be read like a novel. We enthusiastically recommend it to every student.

DOUGLAS W. MACOMBER.

ARMY NEEDS PUBLIC HEALTH OFFICERS FOR JAPAN

The Department of the Army is urgently in need of public health officers to serve in a civilian capacity with the occupation forces in Japan. The positions involve supervision of Japanese prefecture (state) health departments in all phases of preventive medicine, and offer an excellent opportunity for broad experience.

Minimum acceptable qualifications are a degree in medicine plus one year of internship. Experience in public health is desirable but is not mandatory. Salary for these positions is $6,235.20 per year plus 10 per cent post differential, with quarters provided at no cost to the employee. Individuals selected must agree to remain a minimum of two years. Transportation to and from Japan is furnished, and dependents may join the employee in from six to eight months after his arrival in Japan.

Forms for application may be obtained from any Class A post office.

CERTAIN "COLD" WAVE PRODUCTS, COSMETICS ARE GRANTED A.M.A. SEAL OF ACCEPTANCE

Certain "cold" wave products and cosmetics of two companies have been accepted as conforming to the rules of the Committee on Cosmetics of the American Medical Association, according to an announcement in the current (September 10) Journal of the American Medical Association.

This is the first "acceptance" reported since the A.M.A. recently made it known that its Seal of Acceptance would be issued for cosmetic preparations meeting scientific standards. Other products are under test. The announcement was made by Dr. Austin Smith, Chicago, secretary of the committee and also secretary of the Council on Pharmacy and Chemistry of the A.M.A.

The Seal of Acceptance was issued for Rayve Creme Waving Lotion and Rayve Neutralizer, two "cold" waving ingredients in Rayve Home Permanent, a product of the Pepsodent Division, Lever Brothers Company, and for hypo-allergenic products of Marcelle Cosmetics, Inc.

The prevention of irregular discharge begins at the beginning of treatment. And treatment begins at diagnosis, at the time when the patient is first informed that he has tuberculosis.—William B. Tollen, Ph.D., VA Pamphlet 10-27, October, 1948.

STUDY EFFECT OF HAY FEVER DRUGS IN EPILEPSY

Study of the effect of two widely used hay fever drugs, benadryl and pyribenzamine, on epilepsy shows that benadryl decreases the frequency of seizures of the petit mal form of the disease, according to a report in the current (September 3) Journel of the American Medical Association.

Petit mal is the less severe type of epilepsy in which the sufferer is dazed for a few seconds at a time.

No claim is made by Drs. John A. Churchill and George D. Gammon of the University of Pennsylvania, Philadelphia, who reported on the drugs, that benadryl can be used as a treatment for petit mal at present.

The study shows further that both benadryl and pyribenzamine are capable of inducing more severe seizures in patients with certain brain lesions, and that pyribenzamine also increases seizures of petit mal epilepsy.

THE USE OF ANTIHISTAMINICS IN THE TREATMENT OF MULTIPLE SCLEROSIS

In a paper given before the clinical session of the annual meeting of the American College of Allergists, Dr. Hinton D. Jonez reported that he had obtained excellent results in the treatment of multiple sclerosis at The Multiple Sclerosis Clinic in St. Joseph's Hospital at Tacoma, Wash. The plan followed there was to use a combination of anti-histaminic drug in the form of Thenylene or Benadryl and Rabellon, which is the trade name for a new prescription of hyiscyamine hydrobromide, atropine sulfate, and scopolamine hydrobromide.

When Reballon was used alone, the improvement was slow and slight; when the anti-histaminics were used alone, no results were obtained. Doctor Jonez concluded that the anti-histaminic did not work from the allergic point of view, but that some other function of these drugs aided Reballon.

With the interest of the public now centered upon the dreaded disease and upon the importance of finding a cure, these findings attracted much interest among those physicians present although, as is right, most of them feel that more evidence and research will confirm what is undoubtedly a brilliant piece of work on the part of Dr. Jonez.

ONE DRUG MAY PRODUCE ALLERGY TO ANOTHER

It has been reported that one coal tar drug may make the patient allergic to another coal tar drug. Dr. Glenn Greenwood, of Los Angeles, Calif., reported an actual instance of this. The patient, who had a cold, was given sulpha and penicillin as a part of the treatment. Later, when his dentist used a local anesthetic to pull his tooth, he broke out with a case of bold hives.

There are many of the commonly used drugs manufactured from coal tar. This makes self-medication more dangerous today than it ever was before.

HURRYING HAY FEVER TREATMENTS

In an experimental series, Dr. A. L. Maietta, of Boston, reported he had shortened the time necessary to effect tolerance to the ragweed pollen. According to this preliminary report, not only was the time shortened, but the number of injections reduced to eight and the results were apparently better. Dr. Maietta's method was to use an antihistaminic before, after and with the injection. It was emphasized by several members of the college that this method was interesting and while it no doubt cut down on the number of reactions that followed these injections, the work would have to be confirmed further before it could be accepted that this method gave better results.

HOUSE DUST AND MOLDS AS THE CAUSE OF HAY FEVER AND ASTHMA

In recent years many cases of asthma and hay fever, the cause of which could not be determined, have been proven to be instances of allergy to molds. The inefficient methods that are used today to control the accumulation of house dust in the home have made it easy for many allergic persons to become sensitive to house dust.

Under a grant from The American College of Allergists Research Fund, Dr. Morris Scherago, Professor of Bacteriology at the University of Kentucky, with his associates, has been studying the distribution of molds out-of-doors, indoors, and in house dust. Drs. Scherago, Elizabeth Wallace, and R. H. Weaver have reported their studies on the air in various parts of the city of Lexington. They informed the members of The American College of Allergists how they had found it most important to make mold surveys of homes of those patients having symptoms of hay fever and asthma, when other well-known allergens have been ruled out as a cause of trouble. The number of mold spores in the air was lower in the winter than in the summer, but the number in the dust of the house was about the same at all seasons of the year.

ALLERGY AS A CAUSE OF "ACUTE ABDOMEN"

One of the most difficult problems that faces a physician is to recognize the acute abdmen calling for immediate surgery as different from the acute abdomen due to an allergic condition. The symptoms are quite simliar, and worst of all, the allergic person can be attacked by acute appendicitis or gall bladder infection just as the non-allergic individual can.

Dr. F. B. Schutzbank, of Tucson, Ariz., described a series of such cases before The American College of Allergists. He gave the fine points of diagnosis, but pointed out that these are for expert diagnosticians. In most instances, Dr. Schutzbank said, the case should be looked upon as a case of acute abdomen" and its allergic nature considered later. In other words, the allergic point of view should apply to the prevention and not to the immediate treatment of the emergency.

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YOUR ASTHMA CAN BE YOUR HEART

It is sometimes very difficult to differentiate between the symptoms of asthma and those of heart disease, particularly the type which is likely to awaken the patient during the night. The symptoms of asthma resemble those of heart disease as well in the older age group where high blood pressure, hardening of the arteries, and coronary artery disease of the heart are so common, Drs. Maxwell L. Gelfand and Robert Widlitz, of New York City, report.

The New York physicians report their difficulty with six such cases and how they discovered that when they injected mercurial compound to drive the water out of the tissues, their patients promptly lost a good deal of water and, consequently, several pounds of weight, and their condition definitely improved. This proved to these physicians that they were dealing with heart disease in these asthmatic, elderly men and that management along these lines brought considerable relief, making it possible for the patient to carry on his treatment at home.

COSMETICS CAN BE DANGEROUS

The steadily increasing use of cosmetics during the past ten years has resulted in a corresponding increase in reports of skin eruptions due to some ingredient in a cosmetic regularly used by the patient. For more than twenty years the well-established manufacturers of these items have been concerned with this problem and have spent considerable sums of money in order to make certain that no one would become allergic to their products or would develop a skin irritation through usage of the cosmetic.

By insisting on more rigid control of the manufacturing process and a wiser selection of the ingredients to be used, the United States Food and Drug Administration and the American Medical Association have been directing the less responsible producers of cosmetics to give similar consideration to their products before putting them on the market.

Tuberculosis patients discharged from sanatoria face the future with various life expectancies. Their subsequent mortality is in part influenced, as in the general population, by sex, race and age. The fact that they have had tuberculosis and have been treated for it may also affect their length of life. For one thing, tuberculosis is a disease which places great stress upon the family involved. It sometimes reduces the level of living to such a point that the mortality risk of the patient returning to the family group may be increased, since higher mortality rates are associated with lower family incomes. Premature efforts on the part of the patient to return to gainful employment in order to restore the standard of living may result in relapse and death.—Agnes W. Brewster, A.B., and Ralph Carr Fletcher, M.A., Pub. Health Rep., June 3, 1949.

A roentgenographically normal chest in a person over 40 does not eliminate the possibility of pulmonary tuberculosis developing in the future. Incipient pulmonary tuberculosis in persons over 40 may be much more common than is generally supposed.—Aaron D. Chaves, M.D., Am. Rev. Tuberc., May, 1949.

NEW MACHINE TO STUDY ASTHMA

A new machine has been devised by Dr. Harold A. Abramson, of New York City, for the study of asthma—especially experimentally induced asthma and the various vapors that are used in its treatment. This machine will also make it possible, the inventor pointed out, to compare the results different observers get with the same drug when used as an inhalment vapor (aerosol). It will accurately gauge the amount of drug delivered to the patient's lungs during the treatment and secondly it will place the study of lung function on an acceptable basis for comparable studies. In this way, it will be possible to duplicate and confirm or disprove the work of others.

In commenting upon this invention, Dr. Fred W. Wittich, of Minneapolis, said, "This device should advance our knowledge of asthma, its mechanism, and its treatment."

BLOOD CHANGES IN CONSTITUTIONAL REACTIONS

For a long time most allergists have believed that the presence of an increased number of the white blood cells with eosin staining granules is a sign of allergy. Some have felt that the number of eosinophiles were roughly proportional to the severity of the allergy. Certain physicians have used these facts to diagnose reactions as allergic and to thus identify the offending substances.

Drs. John Mitchell and Jesse Gamble, of Columbus, Ohio, studied four patients who were proved sensitive to cottonseed. These individuals voluntarily took cottonseed extract injections graduated in dosage until they began to wheeze. One blood count after another, taken before, after, and during the experiment, were made by competent technicians to insure accuracy. No significant change in the number of these eosin-staining cells could be detected. This is another bit of evidence discrediting some of the earlier observations about the diagnostic value of these cells.

A NEW THEORY ON ALLERGY

Dr. Frank A. Nantz, Cincinnati, Ohio, has proposed a new theory to explain the relationship of allergy to bacteria and immunity to these same bacteria. This new theory evolved as a result of the investigations on allergy to bacteria carried out by Dr. Nantz and Dr. Herman Blatt, also of Cincinnati. In brief, it takes into consideration the presence of anti-biotics among the bacteria in and on the various parts of the human body. We are finding out how the various bacteria fight among themselves to the death for supremacy and Dr. Nantz insists that these new facts must be taken into consideration when we try to explain both allergy and immunity.

A NEW DRUG FOR SEVERE ASTHMA

A new drug was reported by Dr. Clarence Bernstein, of Orlando, Fla., which he has found to be most successful in the prompt relief of the most severe asthma cases, even those resistant to the usual remedies. Its name is Dibenamine and its action is such as to commend it to break through these impossible situations often encountered with the more severe asthmatics where none of the other remedies will work.

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